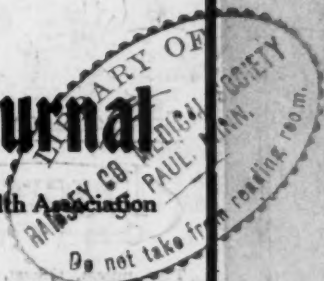


The Public Health Journal

The Official Organ of the Canadian Public Health Association



20 cents
a Copy

Lumsden Building
TORONTO, CANADA

\$2.00
a Year

12—SPECIAL ARTICLES—12

ON

THE PROBLEM OF THE FEEBLE-MINDED

BY

E. R. JOHNSTONE
LUCY W. BROOKING
MRS. STEAD
R. B. CHADWICK

R. H. COWLEY
JAMES McNEILLIE
MRS. ADAM SHORTT, M.D.
MRS. WILLOUGHBY CUMMINGS

SHERIFF D. M. CAMERON
DR. GEORGE S. STRATHY
CONTROLLER McCARTHY
LT.-COL. J. E. FAREWELL, K.C.

[This is the first time such a valuable collection has appeared in any Canadian Journal and will prove not only interesting and instructive but will stimulate readers to do something for this unfortunate class.]

RURAL COLD STORAGES. CHRONICLES "EN ROUTE"

By P. H. BRYCE, M.A., M.D.

By FLORENCE WITHROW, B.A.

ARCHIBALD LAMPMAN

A CANADIAN POET

(Another article of a series that is creating wide-spread interest)

? ETHICS ?

(An attempt to present an object lesson, much needed at the present time)

GINGERING UP THE SALES FORCE

By TIM THRIFT

(A Racy article on Modern Methods of Business)



"Spreads like Butter"

Ingersoll
Cream Cheese

The purest, richest, creamiest
cheese money can buy. Makes
the most delicious sandwiches.

Ask
your
Grocer



15c
& 25c
Pack-
age of

The INGERSOLL
PACKING Co Ltd.

Sold by all Grocers.

Ingersoll, Ontario

15c. and 25c. a package.

MANUFACTURED BY

THE INGERSOLL PACKING CO.

LIMITED

INGERSOLL

ONTARIO

One of the surest ways
of keeping in good health
is to eat Pure Food . .

The Meat Products of

The Wm. Davies Co., Ltd.

TORONTO

are prepared under Government
inspection, which insures that the
meat is from animals free of dis-
ease, and that the product has
been prepared according to Gov-
ernmental regulations.

Davies' products are sold by most
Provision Merchants, and through the
Company's own stores in Ontario
and Quebec.

?

WATER PURIFICATION

*Why don't you call or
write us for particulars of
Pressure Filtration*

*Do so, you will find it
time well spent for muni-
cipal or industrial purposes*

**Bell Filtration Company
of Canada, Limited**

305 Kent Building, Toronto

MODIFIED MILK POWDER (C.M.P.)

SWEET WHEY POWDER (C.M.P.)

IT is only recently that physicians have generally realized the importance of a *Split Proteid* modification of milk for infant feeding, whereby the casein content is lowered and the milk-albumen content is raised. This cannot be accomplished by the customary home modification, but is the basis of our preparations as appears from the following analysis:

Modified Milk Powder (C.M.P.)

Fat	11.55%
Casein	9.50
Lact. Albumen..	9.60
Milk Sugar	60.10
Ash	7.75
Moisture	1.50
	<hr/>
	100.00%

Sweet Whey Powder (C.M.P.)

Casein35%
Lact. Albumen..	12.38
Milk Sugar	76.55
Ash	9.10
Moisture	1.62
	<hr/>
	100.00%

If a variant from the above proportions is needed by a physician in a given case, it can readily be obtained by a combination of the two in varying proportions. Free samples and pamphlets on the same gladly sent to any physician.

CANADIAN MILK PRODUCTS, LIMITED

MAIL BUILDING TORONTO, ONT.

If you have a baby you owe it to the child to write to us.

Our scientifically prepared foods are saving many lives.

CONGRESS, 1914
Fort William and Port Arthur
Canadian Public Health Association

PATRON

FIELD MARSHAL, HIS ROYAL HIGHNESS THE GOVERNOR GENERAL

VICE-PATRON

RT. HON. R. L. BORDEN, P.C., M.P., G.C.V.O. PREMIER.

PAST HONORARY PRESIDENTS AND HONORARY VICE-PRESIDENTS

Sir Edmund Osler
Sir James A. Grant
Hon. A. I. Sifton
Hon. J. M. Methuen
Rt. Hon. Sir Wilfred Laurier

Hon. W. Scott
Colonel Hon. S. Hughes
Hon. Martin Barrill
J. C. Eaton, Esq.
Hon. W. J. Hanna

Hon. Clifford Sifton
Hon. Sir James Whitney
Hon. G. H. Murray
E. R. Wood, Esq.
Hon. Sir R. McBride

Hon. Sir E. P. Roblin
Hon. H. E. Flanagan
Hon. Sir Lomer Gouin
Hon. J. D. Hazen
Sir William Van Horne
Hon. George Langley

HONORARY PRESIDENT

ADAM H. WRIGHT, M.D., TORONTO
Chairman of the Provincial Board of Health, Ontario.

PRESIDENT

MAURICE M. SEYMOUR, M.D., REGINA

VICE-PRESIDENTS

J. D. PAGE, M.D., QUEBEC. T. AIRD MURRAY, C.E., REGINA. DUNCAN M. ANDERSON, M.D., TORONTO.
PROFESSOR J. A. AMYOT, M.D., University of Toronto. T. H. WHITELAW, M.D., EDMONTON.
P. B. TUSTIN, WINNIPEG.

GENERAL SECRETARY

MAJOR LORNE DRUM, M.D., D.P.H., OTTAWA

TREASURER

GEORGE D. PORTER, M.B., TORONTO

EXECUTIVE COUNCIL

PAST PRESIDENTS:

T. A. Starkey, M.D., D.P.H., Montreal.
Charles A. Hodge, M.D., D.P.H.,
Ottawa.
J. W. S. McCullough, M.D., Toronto

P. H. Bryce, M.A., M.D., Ottawa.
F. Montisambert, M.D., O. Ottawa
E. F. Lachapelle, M.D., Montreal.
Col. G. C. Jones, G.G.H.S., D.G.M.S.,
Ottawa.
J. O. Rutherford, H.A.E.V.S., C.M.G.,
Calgary.

C. J. O. Hastings, M.D., Toronto
H. W. Hill, M.D., London
R. E. Wodehouse, M.D., Fort William

J. Goellin, M.D., Quebec
Albert Chevalier, Esq., Montreal
Prof. Fraser Gurd, M.D., Montreal
Murray McLaren, M.D., St. John
Rev. Mr. White, D.D., St. John
F. W. Walmsworth, M.D., Fredericton
John Stewart, M.D., Halifax
S. L. Walker, M.D., Truro
F. L. Ford, M.D., Milton
H. D. Johnson, M.D., Charlottetown
S. R. Jenkins, M.D., "
I. J. Yen, M.D., "
G. D. Mackie, M.I.M.C.E.
Swift Current
W. A. Thomson, M.D., Regina
D. A. Stewart, M.D., Winnipeg

F. F. Westbrook, M.D., Vancouver
F. T. Underhill, M.D., Vancouver
Dr. Arthur Nelson, B.C.
W. C. Laidlaw, M.D., Edmonton
D. G. Revell, M.D., Edmonton
Harold Orr, M.D., Medicine Hat
M. E. Eow, M.D., Regina
Mrs. A. M. Huettner, Toronto
Mrs. J. C. McLimont, Quebec
W. E. Struthers, M.D., Toronto
Miss Helen B. Y. Reid, Montreal
Major D. B. Bentley, M.D., London
Major F. L. Vaux, M.D., Winnipeg
W. W. Andrews, L.L.D., Regina
D. I. Dunn, M.D., Edmonton

EXECUTIVE COMMITTEE

THE PRESIDENT, GENERAL SECRETARY, and TREASURER, ex officio, and
DR. C. J. O. HASTINGS Medical Officer of Health, Toronto, DR. C. A. HODGETTS, Ottawa,
DR. DUNCAN M. ANDERSON, Toronto.

Active membership, \$3.00 per annum, is obtainable by Canadians directly interested in matters bearing on public health, such as physicians, engineers, architects, etc., and permits official co-operation in the work of the Association. For others, subscription to *The Public Health Journal* at \$2.00 per annum includes associate membership see terms, etc., page v.

Make Cheques, etc., payable to the "Treasurer, Canadian Public Health Association."



THE ORIGINAL
AND LEADING BRAND
SINCE 1857

BORDEN'S Eagle Brand

Condensed Milk

*For three generations has been the
World's Leading Brand for
Infant Feeding.*

Always uniform in composition; easily
prepared; economical.

It provides a safe, wholesome substi-
tute when Nature's supply fails.

Send for Booklet and Feeding Chart

Borden Milk Company, Limited

396 St. Paul St.

MONTREAL

Proven Purest and Best —



E. D. Smith's & Son, Ltd.

Jams, Jellies and Marmalade

¶ The Trademark that stands
for Quality.

¶ See Government Analysis,
(Bulletin No. 244).

—Also Manufacturers of—

Cordials, Catsup and Canned Goods

Winona, Ont.



For Light and Nourishing Food it's Always Safe to Recommend

CHRISTIE BISCUITS

the purest of all pure foods—biscuits just as near perfection as first-class ingredients and scientific baking, by twentieth century methods, can make biscuits.

Christie Biscuits mean the best ingredients money can buy—all first-class table quality—mixed and baked in the Christie scientific way and packed in dust and damp proof tins and packages to assure lasting goodness. You may heartily recommend Christie Biscuits, if you want to recommend the best biscuits on the market—not because we say so, but because the particular housewives of Canada have proved them so.

N.B.—Our Zephyr Cream Sodas crushed in Cream or Fresh Sweet Milk certainly do make a light and nourishing breakfast.

CHRISTIE, BROWN & CO., Limited
TORONTO, ONTARIO

The Public Health Journal

The Official Organ of the Canadian Public Health Association

Copyright

APRIL, 1914, INDEX

Registered

[Reproduction of contents may be made, accompanied by acknowledgement to *The Public Health Journal*.]

	Page.		Page.
INTRODUCTORY.	207	Rural Cold Storages, a Scientific and Economic Necessity. By P. H. Bryce, M.A., M.D.	238
FRONTISPICE.	208	Chronicles "En Route." By Florence Withrow, B.A.	243
SPECIAL ARTICLES—		EDITORIAL.	248
Waste Humanity. By E. R. Johnstone.	209	BOOK REVIEWS	250
We Pay. By Lucy W. Brooking.	212	CANADIAN POETS	253
The Nova Scotia League, for the Care and Protection of the Feeble Minded. By Mrs. Stead	219	CORRESPONDENCE CORNER	257
Mental Defectives in Alberta. By R. B. Chadwick	220	MATTERS MILITARY	259
Mentally Defective Pupils in the Public Schools of Toronto. By Chief Inspector R. H. Cowley	223	? ? ETHICS ? ?	268
Feeble Minded Women in Houses of Refuge. By James McNeillie, Clerk of the County of Peterborough.	225	MEETINGS AND REPORTS	270
An Old Text. By Mrs. Adam Shortt, M.D., Ottawa	227	SANITARY INSPECTORS' ASSOCIATION	272
The Problem of the Feeble Minded. By Mrs. Willoughby Cummings, D.C.L.	229	Gingering up the Sales Force. By Tim Thrift	278
Feeble Mindedness—A Municipal Problem. By Donald M. Cameron, Sheriff of Middlesex, London, Ont.	231		
The Feeble Minded and Social Evils. By Dr. George S. Strathy, Toronto	232		
Municipal Responsibility. By Controller McCarthy, Toronto	234		
The Feeble Minded and Crime. By Lt.-Col. J. E. Farewell, K.C.	236		

No advertising would be, or could be, printed in the *Public Health Journal*, unless advertising had been amply proved to be of very great value to the reader. More good advertising in these pages would be of advantage to you. A more lively responsiveness on your part to the announcements already appearing would be convincing testimony to your desire that *The Journal* should be more than ever a directory of substantial concerns to which you might confidently turn for needed supplies. Will you help make it so?

THE PUBLIC HEALTH JOURNAL is published on THE 15TH OF EACH MONTH by the York Publishing Company, Limited, Lumsden Building, Toronto. \$2.00 per year in Greater Britain and United States; Foreign, \$3.00.

CHANGE OF ADDRESS: In all changes of address it is necessary that the old as well as the new address be given.

REPRINTS will be furnished at the following prices provided a request accompanies the MSS:—

Two Page	100 copies, \$2.75;	each extra 100 copies 15 cents
Four Page	100 copies, \$4.00;	each extra 100 copies 20 cents
Six Page	100 copies, \$5.75;	each extra 100 copies 30 cents
Eight Page	100 copies, \$7.00;	each extra 100 copies 35 cents

Covers cost \$2.50 for first 100 and \$1.00 for each extra 100

ADVERTISING RATES will be furnished on application.

ADDRESS in every case, "THE PUBLIC HEALTH JOURNAL" Lumsden Building Toronto, Canada; adding name of department it is desired to reach as, "Editorial" or "Business."

ENTERED according to act of Parliament of Canada, in the year one thousand nine hundred and fourteen at the Department of Agriculture. All rights reserved.

The Best Antiseptic for Purposes of Personal Hygiene

LISTERINE

Being efficiently antiseptic, non-poisonous, and of agreeable odor and taste, Listerine has justly acquired much popularity as a mouth-wash, for daily use in the care and preservation of the teeth.

As an antiseptic wash or dressing for superficial wounds, cuts, bruises, or abrasions, it may be applied in its full strength or diluted with one to three parts water; it also forms a useful application in simple disorders of the skin.

In all cases of fever, where the patient suffers so greatly from the parched condition of the mouth, nothing seems to afford so much relief as a mouth-wash made by adding a teaspoonful of Listerine to a glass of water, which may be used ad libitum.

As a gargle, spray or douche, Listerine solution, of suitable strength, is very valuable in sore throat and in catarrhal conditions of the mucous surfaces; indeed, the varied purposes for which Listerine may be successfully used stamps it as an invaluable article for the family medicine cabinet.

Special pamphlets on dental and general hygiene may be had upon request.

LAMBERT PHARMACAL COMPANY
LOCUST and TWENTY-FIRST STREETS ST. LOUIS, MO.

KRESO

An Ideal Disinfectant, Germicide, Deodorant

Antiseptic and Parasiticide

For Hospitals, Veterinary and Domestic Use

Write for Descriptive Booklet

Parke, Davis & Co.

Manufacturing Chemists and Biologists,

WALKERVILLE, ONTARIO

Eastern Depot, 375 St. Paul Street, MONTREAL, QUE.

Duncan's Aldoform Tablets

These Tablets are composed of Formaldehyde in combination with sugar, etc., and suitably flavored, so that the pungent taste of the Formaldehyde is completely covered.

Aldoform Tablets (Duncan) are intended to be slowly dissolved in the mouth, thus allowing the valuable antiseptic powers of the Formaldehyde to have full therapeutical effect.

These Tablets are a powerful remedy for septic throats and any foul conditions of the mouth, such as occur in cases of fever, etc. They are extremely useful for juveniles and others to whom gargling is a difficulty. They quickly control bacterial growths and form a perfect antiferment for oral purposes.

Aldoform Tablets are absolutely devoid of all irritating properties and being non-toxic can be frequently used without producing ill effects.

Each Tablet contains 1 per cent. of Formaldehyde.

Duncan, Flockhart & Co.
EDINBURGH and LONDON

MAY BE ORDERED THROUGH ALL RETAIL DRUGGISTS

SAMPLES ON REQUEST

R. L. GIBSON,

88 Wellington Street West, Toronto, Ontario

5c.
a Cake

LIFEBUOY
SOAP

In Treating the Skin

Lifebuoy is the perfect soap to use in connection with the treatment of all skin ailments.

The cocoanut and red palm oils are soothing and comforting to an irritated or sensitive skin.



All
Grocers

But the greatest value of Lifebuoy lies in its purifying carbolic solution. This prevents the affection of adjacent parts and forms a constant safeguard.

LIFEBUOY
HEALTH SOAP

LABORATORY SUPPLIES

INGRAM & BELL, LIMITED

We are in a position to fully equip any size laboratory, being representatives of some of the best known firms in these lines, as follows :

Microscopes—Bausch & Lomb, Zeiss, Spencer.

Autoclaves and Incubators—Bramhall Deane Co. of N.Y.

C. P. Chemicals—Baker & Adamson, Kahlbaums, Mercks.

Centrifuges—International Instrument Co., Cambridge, Mass.
—Shelton Electric Co.

Laboratory Glassware—Direct Importers of Jena Glass and
Resistance Chemical Glassware.

Haemocytometers—Thoma, Tück.

Grubler's Stains, Haemoglobinometers, etc., etc.

We solicit your orders. Quotations gladly given.

Ingram & Bell, Limited

New Address : 256 McCaul St. (1 door south of College) ~~ST. C.~~ Toronto

NEW BOOKS

BLOOD PRESSURE, from the Clinical Standpoint. By Francis A. Faught, M.D., formerly Director of the Laboratory of Clinical Medicine, Medico-Chirurgical College of Philadelphia. Octavo of 281 pages, illustrated. Cloth, \$3.00.

OPERATING ROOM AND THE PATIENT. A Manual of Pre and Post-Operative Treatment. By Russell S. Fowler, M.D., Chief Surgeon, First Division, German Hospital, Brooklyn. Octavo volume of 611 pages, illustrated. Cloth, \$3.50.

PSYCHANALYSIS. Its Theories and Practical Application. By A. A. Brill, Ph.B., M.D., Chief Assistant in Psychiatry and Neurology at Columbia University Medical School; formerly Assistant Physician to Central Islip State Hospital, and to the Clinic of Psychiatry, Zurich. Octavo volume of 337 pages. Cloth, \$3.00.

APPLIED BACTERIOLOGY FOR NURSES. By Charles F. Bolduan, M.D., Assistant to the General Medical Officer, and Marie Grund, M.D., Bacteriologist, Research Laboratory, Department of Health, New York City. 12 mo. volume of 160 pages, illustrated. Cloth, \$1.25.

ACUTE ABDOMINAL DISEASES. By Joseph E. Adams, M.B., M.D., London, F.R.C.S., England. Senior Assistant Surgeon, East London Hospital for Children, Hunterian Professor, Royal College of Surgeons of England; and Maurice A. Cassidy, M.A., M.D., B.C. Cantab, F.R.C.P., London. Physician with charge of Out Patients, St. Thomas' Hospital. Containing 571 pages, illustrated. Cloth, \$4.00.

The J. F. HARTZ COMPANY
LIMITED

406-408 Yonge St.,

Toronto

Merck's Archives

presents each month a review of progress in the treatment of disease and modern discoveries in drug therapy.

It is eminently a journal for the busy general practitioner.

A pleasing variety is afforded by a department of General Interest and of Miscellany, Editor's Notes, Book Notes, etc.

Sample copies furnished to physicians on request

Subscription price, \$1.00 a year

PUBLISHED BY

MERCK & CO.

45 Park Place

New York



The Peculiar Advantage of the

Marvel "Whirling Spray" Syringe

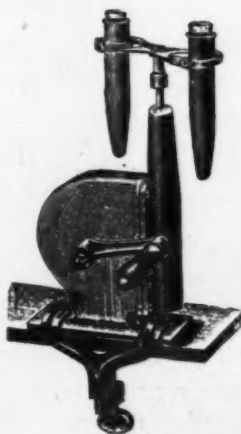
Prominent physicians and gynecologists everywhere recommend the MARVEL Syringe in cases of Leucorrhea, Vaginitis, and other vaginal diseases. It always gives satisfaction.

The Marvel Company was awarded the Gold Medal, Diploma and Certificate of Approval by the Societe D'Hygiene de France, at Paris, October 9, 1902.

All Druggists and Dealers in Surgical Instruments sell it. For Literature address

is that **The Marvel**, by its centrifugal action **dilates and flushes** the vaginal passage with a volume of whirling fluid, which smooths out the folds and permits the injection to come in contact with its entire surface.

MARVEL COMPANY, 44 E. 23rd St., New York



Centrifuges and other Analysis Equipments

¶ We carry at our establishments in Toronto, Winnipeg and Vancouver complete stocks of CENTRIFUGES, operated by hand, by electricity, and by water power.

¶ We have supplied a number of Municipalities with water power CENTRIFUGES for use in their medical health department. This is a very satisfactory apparatus where a medium water pressure is obtainable and can be supplied complete at \$12.00 each.

THE STEVENS COMPANIES

396 Notre Dame Ave.
WINNIPEG

145 Wellington St. W.
TORONTO

748 Richards St.
VANCOUVER

Hospital for Nervous Diseases —TORONTO—

PRIVATE MEDICAL HOSPITAL,
devoted exclusively to the treatment
of Organic and Functional Diseases of
the Nervous System, especially Neuras-
thenia in its various forms.

NO INSANE NOR DRUG HABIT CASES RECEIVED FOR TREATMENT

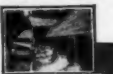
For further particulars apply to CAMPBELL MEYERS, M.D.,
72 Heath Street, Toronto, Canada.

MUSKOKA COTTAGE SANATORIUM GRAVENHURST, ONTARIO, CANADA

For booklet apply to W. B. Kendall, M.D., C.M., L.R.C.S., L.R.C.P., Physician-in-Chief

*"No better Atmosphere in the World for a
Consumptive than that of your own Muskoka."
Sir Wm. Osler*

Regular Rates
\$15 to \$20 per
week



*Separate
Accommodation
for advanced cases
in Reception Hospital
Rates from \$25 per week*

*Reception Hospital for
Advanced Cases*



THE HIGH PARK

(TORONTO)

SANITARIUM

(Affiliated with Battle Creek Sanitarium)

CANADIAN EXPONENT OF THE

BATTLE CREEK SYSTEM

A most scientifically equipped private medical institution for the treatment of chronic cases

**Neurasthenia, Dyspepsia, Rheumatism,
Diabetes, Anemia, Obesity, Goitre,
Paralysis, Cardiac and Renal Diseases.**

Unexcelled facilities for the administration of Massage, Swedish Movements, Special Dietaries, Medical Electricity and Baths of all kinds, including the Electric Light Bath.

Beautifully located in extensive private grounds adjacent to 500 acres natural park.

Private water supply from artesian mineral spring.

An ideal place for the semi-invalid to recuperate health and strength, or for the office worker to spend a profitable vacation.

For rates and descriptive literature address:

W. J. McCORMICK, M. D., Supt.

32 Gothic Avenue, Toronto.

Telephone Jct. 444.

INCINERATORS

For cities, or towns of any size, also for use in hospitals, hotels, or large camps.

High Temperature System Utilized.

Garbage Burned without Fuel except the garbage itself.

Steam for power purposes, generated from the waste gases.

Plants erected by

MESSRS. HEENAN & FROUDE of CANADA, LTD.

LAURIE & LAMB, Managers

211-212 Board of Trade Building

MONTREAL

THE SANITARY RECORD and MUNICIPAL ENGINEERING.

37th Year of Publication.

“EVERY CANADIAN HEALTH OFFICER AND SURVEYOR SHOULD BECOME A SUBSCRIBER.”

Published Weekly. Annual Subscription for Canada, \$4.14, Post Free, Including Handsome Cloth Bound Year Book, Diary and Blotter of 200 pages.

“THE SANITARY RECORD” is the Oldest and Leading organ in Great Britain devoted to Public Health, and contains the latest and best information of English practice on :-

**WATER SUPPLY AND SEWERAGE,
HOUSING AND TOWN PLANNING,
ROAD CONSTRUCTION AND MAINTENANCE,
LIGHTING, HEATING AND VENTILATING,
PUBLIC HEALTH ADMINISTRATION,
MUNICIPAL ENGINEERING AND SURVEYING,
NOTES AND QUERIES, etc., etc.**

Specimen Copy and Advertising Tariff free on application.

Head Offices: 55-56 Chancery Lane, London, W. C., Eng.

These trade-mark crisscross lines on every package

**SPECIAL DIETETIC
FOOD**

**FOR CASES OF
KIDNEY AND LIVER TROUBLES
REQUIRING RATHER STRICT DIET**

Unlike other goods ask your physician.
Leading grocers. For box or sample, write
FARWELL & RHINES, Watertown, N. Y., U. S. A.



"NOSTRUMS AND QUACKERY"
[Second Edition]
Caveat Emptor! (Let the Buyer Beware!)

If you would protect your patients against the dangers of "patent medicines" and the wiles of the quack, you need the book "Nostrums and Quackery." The composition of fraudulent "patent medicines" and the dangers one runs in taking them, are explained in this book. The inner workings of quack concerns, the methods employed by these charlatans in obtaining victims, the heartlessness of the fraud on which all irregular medical practice is based—these too, are made plain.

HERE ARE A FEW OF THE MANY SUBJECTS WITH WHICH IT DEALS:

Advertising Specialists	Dietetic Cures	Medical Institutions	Baby Killers	Headache Cures
Cancer Cures	Drug Cures	Obesity Cures	Diphtheria Cures	Fake Collaps
Consumption Cures	Mechanical Fakes	Anthelm Cures	Hair Dyes	Testimonials

This book is issued in a permanent and attractive form, bound in dark green cloth, stamped in gold. More than 700 pages. Over 300 illustrations.

Price **\$1.50**, Postpaid Send Postal for a Description Circular

"CONSUMPTION CURE FAKES" is the name of one of many pamphlets issued by the Association. It is an illustrated brochure that exposes some of the most widely advertised frauds sold as cures for consumption. Postpaid, 15 cents a copy.

AMERICAN MEDICAL ASSOCIATION, 535 N. Dearborn St., Chicago

THE JOURNAL OF COMMERCE

With which is incorporated THE SHAREHOLDER

TWO of the oldest and most reliable Weekly Journals, recently amalgamated to strengthen the work heretofore done by each in the field of Commerce, Finance, Insurance and Industry.
Editor, J. C. Ross, M.A.

Canada's greatest asset is her natural resources, and the commodities by which she is best known are the products of industries engaged in the development of these resources. Canadian ASBESTOS, NICKEL and COBALT control the Markets of the world for these commodities, while her SILVER, PULP and PAPER, and GRAIN and GRAIN PRODUCTS are dominant factors of the world's supplies. The only Periodicals which are devoted entirely to these industries are:

CANADIAN MINING JOURNAL, published twice a month. Editor, Reginald E. Hore, M.Sc.

PULP AND PAPER MAGAZINE OF CANADA, published twice a month. Editor, A. Gordon McIntyre, B.A., B.Sc.

CANADIAN MILLER AND CEREALIST, published once a month. Editor, J. G. Adams, B.A.

CANADIAN TEXTILE JOURNAL, a monthly periodical devoted entirely to Textile Manufacturing, is published from the same Offices. Editor, E. Stanley Bates.

In addition to publishing the above mentioned Journals, we are especially equipped to do all kinds of

FINE BOOK, CATALOGUE AND JOB PRINTING.

MONTREAL OFFICE:

Industrial and Educational Press, Limited
Read Building

TORONTO OFFICE:

Industrial and Technical Press, Limited
44-46 Lombard St.

Standard Methods For The Examination of Water and Sewage

NEW REPORT, SECOND EDITION, 1912

At the Annual Meeting of the Canadian Public Health Association, September 18, 1913, the following resolution was unanimously adopted:—"That the Standard Laboratory Methods of the American Public Health Association be adopted as the standard of the Canadian Public Health Association."

This book, comprising about 150 pages, is the Official Report of the Committees of the Laboratory Section of the American Public Health Association on the physical, chemical, microscopical and bacteriological examination of water.

WHAT IT CONTAINS

It contains invaluable information for all public health laboratory workers, and among many other interesting features the following:

Latest and approved methods of water analysis including many changes and improvements over those incorporated in former report, issued in 1905.

Latest methods of sanitary analysis of water, and complete and thoroughly revised data on the mineral analysis of water.

New and rapid methods for the control of water softening plants.

Complete procedure to be used in the separation and determination of lead, zinc, copper and tin.

Thoroughly revised and complete information concerning the methods of bacteriological examination for intestinal organisms found in water.

Special information on the isolation of typhoid and other pathogenic organisms from water.

Revised data on the making of necessary media for bacteriological analysis.

**THIS REPORT IS INVALUABLE FOR ANYONE WHO HAS TO
MAKE ANALYSES OF WATER. NO LABORATORY
DEALING WITH QUESTIONS OF THIS KIND
CAN AFFORD TO BE WITHOUT IT.**

Attractively Printed. Bound in Waterproof Cloth. 144 pp.

Price: \$1.25 Postpaid.

ORDER FROM

American Journal of Public Health, 755 Boylston St., Boston, Mass.

AMERICAN JOURNAL OF PUBLIC HEALTH

The Official Monthly Journal of the American Public Health Association

30 Cents a Copy. \$3.00 a Year. Three months' trial subscription to new subscribers for 50 cents

Improved Bacterial Therapy

SEROBACTERINS

(Sensitized Bacterial Vaccines)

"Action sure, rapid, harmless and durable."—A. Besredka.

Serobacterins are suspensions of bacteria "sensitized" by treatment with specific immune serum.

The advantages of **Serobacterins** may be briefly summarized as follows:

1. SEROBACTERINS do not cause opsonic nor clinical negative phase. In the process of sensitization the bacteria are saturated with the specific antibodies, consequently they do not absorb antibodies from the patient, preventing unfavorable reactions or the so-called negative phase.

2. SEROBACTERINS produce immediate active immunity.

(24 hours after the first injection an effective immunity is present and marked improvement is usually noted in the condition of the patient.)

This rapid action makes them invaluable in treatment and in preventive immunization. This is of great importance in controlling or preventing epidemics.

3. SEROBACTERINS cause no local or general reactions.

(These reactions constituted the principal undesirable feature of the Bacterial Vaccines.)

4. SEROBACTERINS produce a highly efficient and durable immunity.

The following **SEROBACTERINS** are supplied in the popular Mulford Aseptic Glass Bacterin Syringe, ready for instant use.

Coli-Serobacterin (Sensitized Coli Vaccine)

Pneumo-Serobacterin (Sensitized Pneumococcic Vaccine)

Staphylo-Serobacterin (Sensitized Staphylococcic Vaccine)

Strepto-Pneumo-Serobacterin (Sensitized Strepto-Pneumo Vaccine)

Strepto-Serobacterin Polyvalent (Sensitized Streptococcic Vaccine)

Scarlatina Strepto-Serobacterin (Sensitized Streptococcic Vaccine, Scarlatinal.)

Typho-Serobacterin. (Sensitized Typhoid Vaccine.)

Packages of 4 syringes - - \$4.00

Single syringes - - - 1.50

Each syringe one dose.

For a complete review of the literature on Serobacterins, see Mulford Digest for Dec.

H. K. MULFORD CO., Philadelphia

Pharmaceutical and Biological Chemists

New York
Chicago

Boston
Atlanta

Kansas City
Dallas

St. Louis
Seattle

New Orleans
San Francisco

Minneapolis
Toronto

THE high watermark of interest in the Problem of the Feeble-Minded is registered by this, the first Special Number of a magazine ever issued on this subject. Superintendent Johnstone's high ideals and national reputation inspire confidence and hope in the reader. Miss Brooking's experience and remarkable knowledge are not more evident than her unfailing understanding, sympathy and affection for her poor charges. Mrs. Shortt and Mrs. Cummings were among the first to work and speak for the Feeble-Minded, and their articles will be read with much interest. Colonel Farewell, of Whitby; Sheriff Cameron, of London; Mr. McNeillie, of Lindsay, and Controller McCarthy, of Toronto, present the subject from the point of view of the municipality with overwhelming force. Chief Inspector Cowley's Report is an important contribution from the school point of view. Dr. Strathy's narrative of cases shows how often doctors must face the Feeble-Minded.

The valuable articles by Mrs. Stead, of Halifax, and Mr. Chadwick, of Edmonton, show that East and West alike feel the burden of the Feeble-Minded.

The Editor and those who have assisted him in presenting this Special Number on the Feeble-Minded do so in the hope that our readers when they lay down the magazine will

**GO AND DO SOMETHING FOR THE
FEEBLE-MINDED.**



A Man of Action

THE HON. W. J. HANNA
Provincial Secretary of Ontario

The Public Health Journal

The Official Organ of The Canadian Public Health Association.

VOL. V

TORONTO, CANADA, APRIL, 1914

No. 4

Special Articles

WASTE HUMANITY

By E. R. JOHNSTONE

Superintendent of the Training School for the Feeble Minded, Vineland, N.J.

"What shall we do with the feeble-minded?" has come to be a pressing question. For years society has been gradually awaking to the fact of their presence, and each year brings a greater understanding of their needs. More careful study of the problem shows a much larger number than was formerly suspected.

That heredity is responsible for from fifty to seventy per cent. is agreed. That alcoholism, syphilis and other dissipations are factors to be reckoned with is acknowledged. That much of the increase of poverty, crime, epilepsy and even insanity is due to feeble-mindedness is undoubted. Every careful student of the facts already known realizes that our social burden will be greatly lightened if the feeble-minded are properly segregated. What shall we do with them?

There are idiots, imbeciles, morons and backward children. The morons and the backward children are found in the public schools in large numbers. Goddard's studies showed twelve per cent. of an entire school district below the high school to be two or three years behind their grades, and three per cent. four or more years behind.

As it is difficult for the expert to draw the line between these two classes, par-

ents and teachers are loath to admit that the morons are defective. This problem can best be solved by the establishment of special classes in the public schools for all who lag more than one year behind. If for no other reason, the normal children should be relieved of the drag of these backward pupils. The special classes will become the clearing houses. The training should be largely manual and industrial and as practical as possible. As the number of classes in any school district increases, the classification will sift out those who are merely backward and a little coaching and special attention will return them to the grades. The others—the morons—will remain and as long as they are not dangerous to society (sexually or otherwise) they may live at home and attend the special classes. As they grow older they will be transferred to proper custodial institutions. In the city districts, where there are many classes, this will occur between twelve and sixteen years of age. In the country districts it will occur earlier.

These institutions will be the training schools and will form the centre of the training and care of the other two groups, i.e., the imbeciles and idiots. Branching out from the Training Schools should be

colonies (unless the parent institution is on a very large tract of ground, which is most advisable). These colonies, or groups of comparatively small buildings, should be of two classes. For the imbeciles, simple buildings costing from two to four hundred dollars per inmate. The units might well be one hundred. A unit providing four dormitories, bath house, dining halls, employes' buildings, pump house, water tank, sewage disposal, laundry, stables and farm buildings can be built within the above figures providing the buildings are of simple construction and one storey. This has been done at Vineland by having the larger imbecile and moron boys make the cement blocks of which the buildings are constructed.

For the idiots the construction can be much the same. Larger porches facing the south and more toilet fixtures will be necessary, and so add a little to the cost.

The colony should be located on rough uncleared land—preferably the forestry land of the province. Here these unskilled fellows find happy and useful occupation, waste humanity taking waste land and thus not only contributing toward their own support, but also making over land that would otherwise be useless.

One reason for building inexpensive buildings is that having cleared a large tract—say 1,000 acres—the workers can be moved to another waste tract and by brushing, clearing of rocks, draining and what not, increase its value sufficiently to keep on moving indefinitely.

Many of these boy-men make excellent farmers, dairymen, swine herds and poultry raisers under proper direction, and in the winter they can work in the tailor, paint, carpenter, mattress and mat shops.

Nor need this be confined to the males alone. The girl-women very successfully raise poultry, small fruits and vegetables. They pickle and can the products of the land, and in winter do knitting, netting and sewing of all kinds.

No manufacturer of to-day has let the product of his plant go to waste as we have wasted the energies of this by-product of humanity. And the feeble-minded are so happy when they have occupation suited to their needs. If one will but see the epileptics at Woodstock and the

feeble-minded at Orillia when they are set at occupations within their comprehension and ability, he will quickly understand the joy they get out of congenial work.

Every province in Canada will save money by going at this in a comprehensive manner. These "innocents" are being punished in jails and prisons, attempts are being made to reform them (they are not reformable), poor houses and hospitals for the insane contain many in an improper environment where they are a useless burden, and in the public schools and on the streets they serve as an expensive clog to progress.

Let us look at it in a business way if sentiment is not strong enough to make us act. Give these child-minds in the bodies of men and women an opportunity to develop and act. Stop paying for their keep (for they must live and be cared for somewhere) without getting any return, and put them at useful employment, where in an atmosphere of happiness hardly believable they will return much of what it costs to care for them.

They ask only an industrial opportunity. Some one must provide the job, direct the work and care for the product. This is the work of normal minds. The feeble-minded will perform the task. Once having learned how, a feeble-minded person is delighted to do a thing over and over again, if some normal person will pat him on the back, encourage him and give him a smile.

If half a dozen active men and women in each province will form themselves (or get themselves appointed) into a committee and go to work, all that has been suggested above can be accomplished in a very few years.

Let them begin by getting the names and addresses of those feeble-minded whose parents or guardians wish them placed in proper institutions, and of those who are now in institutions not intended for the feeble-minded. Many names could be secured from the waiting list at Orillia and from the various charitable organizations. Address letters to parents, telling them that the committee is trying to get proper care and training for their children, and ask them for the

names of business and professional men and women who actually know the children.

Send letters to these people calling attention to the needs of these children, and asking them to see personally or write to the law-makers from their districts. If you would impress the law makers, have the parents take the children to their homes so that they may see the need.

Tell these people and the law makers that it is merely a matter of making the necessary appropriations. When the voters tell those for whom they vote that there is a need in the district, the law makers will listen.

Write the facts—no need to give names—in readable form, and send to every newspaper in the province, and most of them will publish your letters—often as editorials.

This thing has been done in New Jersey and in Pennsylvania. The latter state, which now has three institutions, as a result has just appropriated money for an extra colony for feeble-minded women to be built on the State forestry land. New Jersey has three institutions, and last year the Vineland School started one colony as above described. A second was opened on State land January 15, 1914.

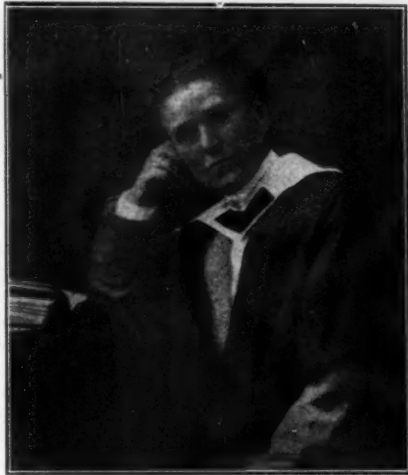
and three other counties are just waiting for the authorities of the Vineland school to say the word, and they will start colonies.

Through the gifts of a few wealthy men and women the latter school has been able within the past four years, to send out field workers. These women have collected data and aroused interest so that today the people of New Jersey understand their problem and are preparing to meet it fully.

These generous men have gone farther and have established an Extension Department, which is glad to make available to anyone who asks, whatever information it is able to collect from anywhere in the world.

The writer of this article is Canadian-born, and would see with great joy a comprehensive movement in Canada which will grow and expand until every feeble-minded person needing custody or training is happily cared for.

If you read this and say "It shall be done," and then straightway forget—your time and mine has been wasted. If you would help to accomplish something, write to Dr. MacMurchy and say you will help with your time or influence or money if that is needed.



MISS MARY DENDY, M.A.

*One of H. M. Commissioners for the Feeble Minded in England,
under the Mental Deficiency Act of 1913.*

WE PAY

By LUCY M. BROOKING

Superintendent of the Al-xandra Industrial School, Toronto.

DURING an experience of seven years, at the head of two institutions, one a city Rescue Home, and the other a Provincial Industrial School, there have come under my personal care and observation, more than six hundred girls and women of defective mentality. Throughout that time, I have not only thought for them but lived *with* them, day in and day out, until I am fairly familiar with this part of the wreckage of our boasted civilization.

Although these poor souls came under my care at all ages from ten years up, only ten out of the six hundred were perfectly chaste—nearly all had been *victims*.

About one hundred of them were totally alone in the world, or no trace could be found of their relatives. Therefore one could not say with certainty, how large a part heredity had played in fixing their doom. Of all the other five hundred, I cannot recall more than a dozen cases, where there were not one or more persons of feeble mind among their near relatives.

In some cases, I personally know of three generations of feeble-minded in one family, and yet other cases, where all the members of one family were sub-normal.

About three hundred and fifty of these poor girls came under my care as maternity cases, and in no single instance, have I seen a defective girl become the mother of a healthy and perfectly normal child. Many of the children died of marasmus when very young—others pulled through the first year, only to develop some latent trouble at dentition. Others again, having sufficient vitality to struggle on, would develop vicious habits in early childhood, and as time went on, the mental lack would become more and more apparent.

During this time, I have had to do with women of all ages, and of various evil habits, and I have seen with my own eyes, that a large proportion of the diseased filling our hospitals, and the inefficient filling our refuges, and the criminals filling our prisons—in short, a large proportion

of the pitiful inhabitants of the "under-world," are *what they are*, and *where they are*, simply because they have not the mental calibre to be anywhere else. They are perpetually failing, and falling under the burdens of life, and each time they fall, they sink yet lower, and their misery becomes more intense. They *cannot swim*, and they *must sink*, because there is none to help, and those favored ones who can stem the current, shut their eyes, and close their ears to the cry of their suffering.

The priest and the Levite are still on their ancient job of passing by on the other side, and the world's "perpetual children," *unprotected*, are still falling among thieves, who rob them of what little joy there is left to them, and murder all the pure and good within them, and then leave them to perish.

We think, in our pride of race and of intellect, that we have come a long way from the days of exposing the deformed and the weak, to death by the wayside—and that it is a far cry from what we call the inhuman cruelty of the red man, who left the ill and the aged behind on the march, that the progress of the strong might not be impeded—but we have not come so very far, after all is said. We twentieth century Christians and philanthropists are still keeping up the time-honored custom, for we only make an attempt at caring for those of deformed or diseased bodies in our magnificent hospitals and sanatoria, and for those of *diseased* brain (and then only the more dangerous to ourselves) in our beautiful asylums—while these helpless ones of *merely* feeble mind, are still exposed by the wayside, to *worse than death*—and the cry of their torment still ascends to Him who said, "Where is thy brother?" and answered the question "Who is my neighbor?"

But, "curses, like chickens, come home to roost," and neglect of duty, whether in the individual or in the nation, is sowing the seed of individual or national retribution. For example. In our laws respecting

juvenile delinquency, no provision is made for the fact that from thirty to forty per cent. of our juvenile delinquents are of defective mentality, *or they would not be delinquents*. Therefore they must face the world at a specified time, fit or unfit. A child in an industrial school must, according to law, have parole at the end of three years, wise or unwise, with the results which might be expected.

principle that "birds of a feather flock together,"—and now, in exactly eighteen months from the time of her discharge, the poor young wretched husband is in the penitentiary, because he had not the brains to keep him out, and the poor girl and her baby are largely on charity, heart-broken, through the troubles and difficulties of life, with which she had not the mental strength to cope.



The Father and Mother of These Six Children Are Both Feeble Minded.

Moral conditionsunfit for publication. Photograph taken in mid-winter.

One of our girls of very low mentality, had thus to be paroled some two years ago—there were those even more dangerous to the public, who were at the time waiting for the very few vacancies in these very few Refuges for such which our enlightened modern civilization considers necessary. So home our girl went, to a poor, weak, but decent and loving mother. She very soon ran away with, and married a young fellow, also defective—on the never-failing

And we—the country! *We pay.*

Long years ago there was a young woman belonging to a good family in one of our oldest Canadian cities. She was not of strong mind, and early in life she eloped with a man, greatly her inferior in position, but her true mate in intellectual capacity. They had several children born to them, some of moderate mentality, and others inferior. One especially well known to me, struggled on through life—married

a woman of low capacity—worked at what he could compass—mostly as scavenger, and, *reared a good-sized family*, mostly defective, some delinquent, several thieves, one a prostitute, and the end is not yet. My personal experience of this one family has been varied, and if it were possible for some of those making our laws, to have been with me night after night, watching the old grandmother, bereft of what little wit she ever had, to prevent her jumping out of the window, or some equally insane performance—or if they could have spent with me hours upon hours trying to reason some sense and judgment into the head of the father—and weeks and months trying to protect and save the daughter—only to see them all fall victims at last—this one experience, I trow, would prove illuminating.

Some twenty-five years ago, a girl, pretty and attractive, but *weak*—one of those high grade defectives, who usually, when unprotected, leave a track of misery and criminality in their wake; this girl fell a victim to the usual temptation, and was about to become a mother. To avoid publicity, for she was of decent family, she entered a maternity home, and became lost to her people. Her baby was born, apparently normal, and a pretty child. Later the time came for her to face the world again, and she attempted to work for her own living and that of the child. But this woman's body, was only controlled and guided by the mind of a child—and again she became a victim. She struggled along, sometimes working for both children, sometimes failing, but at last, in her weakness and shame and misery, took to drink. The two boys went from one institution to another, and the life of the poor mother became one round of prison, reformatory and rescue home, alternated by a few days, or at most weeks, of the world's work.

The younger boy grew up bright and with some aspirations—but the elder developed all his mother's weaknesses, and in the end received a term in the penitentiary, for some rascality. The younger, who had struggled to keep his head above water, utterly cast down and discouraged, with no father, no name, no home,—mother in the reformatory, and brother in penitentiary, gave up at last, and took his own life in hopeless despair. They had been

helped, all three, by what Christian philanthropy could do, but it *could not* provide the grey matter, and the country *would not* provide the shelter. During this twenty-five years, the mother had been as nearly as can be calculated, *twenty years a public charge*—also the two boys all through their sad childhood—while the one is still a criminal, and likely to remain a burden and a menace to the community. And all this to save caring for one poor girl *at the right time*. Verily our ways of effecting economy, in finance alone, not to mention human life, are strange and past finding out.

Some twenty years ago, a young man, ignorant, but industrious, and with some pluck, married a gentle, sweet-looking, but defective girl. He struggled along in sickness and in health, bearing the family burden of life, weighted down by a wife who grew more feeble-minded as the years and difficulties increased, and by a family of more or less defective children. Finally he went West looking for more remunerative work, and disappeared. Soon the State had to step in, when conditions became a glaring public menace. Now, the mother, eldest boy, and three feeble-minded girls, are a public charge, while the younger ones were taken in hand by the Children's Aid Society. How far improved environment can overcome inherited defect, remains to be seen. The elder ones are *hopeless*.

Yet other cases are known to me where whole families lived in incest, and in surroundings, worse than the beasts, because year after year of perpetual failure went by, their discouragement increased, until at last, like any other wounded animal, they would creep away to some lonely spot, out of sight of the successful and meddlesome competitors in life's hard race, and scratch a bare living out of the rocks, hunting woodchucks and such small game as their poverty and inefficiency could overtake—living on mud floors, in broken-down shacks, with far less decency and comfort than the average pig—sleeping on heaps of straw or rags, breeding vermin and filth of mind and body. Children born promiscuously to all the adult members of such tribes—sometimes done away with, but more often growing up to perpetuate the ghastly tragedy, and frequently to infect other centres with physical and moral

disease—a *canker*, eating out the life of our beloved country.

Such things do not exist—or only exist in an odd and isolated instance in our beautiful and bountiful Ontario, say you? But look. In only seven years experience, I have come across *twenty* such families—enough to infect the Province; and other social workers have had like experiences, and in equally appalling numbers.

Not more than one hundred miles from Toronto, there lived a family—man and

ates, (how can the poor creatures be anything else?) The male parent of most of this tribe is now dead, and the mother, upon latest information, keeping a “house” in the woods. The youngest child taken away by public intervention, and placed in our Industrial School, may possibly have a somewhat brighter future, but even the kindest and best of foster homes cannot supply brain power, and this little girl of fifteen, after three years of steady schooling, cannot yet read a simple story,



The one-room dwelling of a mentally defective family. The one bed—shown in the picture—is a heap of rags.

woman, both feeble-minded and degenerate—with twenty-one children—some *hers*, some *his*, and some *belonging to both*. The home a hut, with rags and boards over the openings called windows—with no floor but hard-tramped mud, no furniture but a few empty boxes, no beds but a heap of rags. The older children are now married, with in some few miles of the parental den, living in homes conducted and furnished after much the same pattern, providing the country with a new crop of degener-

ates and can scarcely do more than sign her name in almost illegible fashion. Will even this child, who has had the best chance of the lot, ever be fit to become the mother of future Canadian citizens?

Some years ago, while in charge of the Toronto Haven, different members of a degenerate family, whom we will call “A”, came under my notice, the father weak in intellect, never able to succeed in any work or undertaking, but of passably decent instincts,—the mother defective, and without

moral sense, left her husband and young children to go off with another man, (in later years making the excuse to her children that this man was better able to provide for her than their father). The six children were all, I am told, subnormal. Three of them came under my personal notice, all defective,—one for years under my care, a young woman of strong animal nature, without the mentality of a normal child of five. Able to work, and work well under direction, but with no capacity for continuity of action, and with absolutely no moral sense. The other two whom I knew, were not quite so low in the scale, but such as would be designated "simple," by even the most superficial observer. This brilliant trio, I have recently learned, are all married, providing the country with a large stock of defectives, of the third generation.

But this is not all. Later, when in charge of the Industrial School, I found a girl of the "B" family, from the same locality—a barren isolated back-country region, making a fitting lair, in which disappointed and broken-spirited defectives do congregate, to hide from light and law, and eke out a wretched existence, and breed their kind amid conditions which beasts would refuse.

This poor girl is also subnormal, sullen and morose, a veritable young Ishmaelite, her hand against everybody, and with a firm conviction that everybody's hand is against her. In time and only after patient winning of her confidence, I found that she had been from early childhood the victim of her own father; her mother helpless to prevent. This young child was taken out to the woods to help set the traps, by means of which they existed, then beaten and choked into submission. Upon further enquiry I found that the father of the "B" family and the mother of the "A" family are brother and sister, and that they in turn were born of degenerate parents. So here again we have three generations, so far as we can judge, each being of a lower grade than their parents, and still going on to reproduce their kind.

All who are in official positions where they come into daily contact with degeneracy, and crime and its causes, are fully alive to the crying need for speedy action.

One gentleman, for many years County Clerk in one of our Ontario counties, states that for twenty-five years nearly the whole of the county expenditure for criminal purposes, was caused by the crimes of one family, feeble-minded and degenerate. County officials almost invariably tell much the same tale. I have never gone into any town or village in Ontario, and conversed with officials regarding this thing, without being informed of two or three families in the locality who are the centres of most of the poverty and criminality, and in nearly every case these prove to be of defective mentality. At a recent trial in one of our county towns where appalling neighborhood conditions were revealed, the centre of infection was found to be a family of feeble-minds—father, mother, one son and three daughters—also two grandchildren. At the preliminary investigation, the writer was directed by the Court to question the principal witness, a child of thirteen now in the care of the Industrial School, because she was so feeble-minded, and her vocabulary was so limited that she could not understand the questions of the lawyers and judge. When existing conditions were made manifest, the presiding judge asked me, as one in the work, and likely to know what was being done, if there was no institution to which he could send the two elder sisters, where their weakness might be sheltered, and the community protected from the ever-present menace. Although as yet, our county Houses of Refuge are almost the only available shelter, from the very nature of their work they are inadequate, as with the best of management and care, both sexes cannot safely be handled in the same institution. This is instanced by the case of a young woman who came under my own care, and who, while living in a County House, became the mother of two illegitimate children, the father of the last being an old man over eighty years of age. Other instances of this kind prove that segregation is most necessary.

Thus instances might be multiplied—in fact I would cite many more typical cases, but the tale would be too harrowing, so I will turn to the picture of what may be done, and what has been done by private philanthropy, even in our own country, though we are still far behind in dealing with this moral and physical plague.

Many convents, and also Protestant institutions in different centres are dealing with as many individual cases as they can handle, and the work done in these ways shows what might be accomplished if such girls were systematically protected, and especially if they were protected *in time*, and taken in charge *before* they become criminal. If I give some instances from the annals of the Toronto Haven and the Girls' Industrial School, it is only because my data is chiefly gathered from those institutions, and the personality of the cases known to me. The statistics of any other institution dealing with the same problem, would tell practically the same tale. And just here let me say, that my experience leads me to the conclusion that two-thirds of all the alcoholism among women which largely fills our women's reformatories and prisons, and vastly increases the army of prostitutes, is due originally to a defective mentality. These defectives are continually failing, disappointed, cast down—subject to untold miseries, and they find temporary respite and an exhilaration in drunkenness. Thus the never-ending Police Court procession in all our cities is kept up, they are forever coming upon public care as criminals, when they might be decent and happy, and largely supporting themselves by honest work.

At the Toronto Haven we sheltered an average family of over one hundred. Fifty per cent. of these were incapable of work, little babies or old women, too feeble even to care for and wait upon themselves. The remaining fifty per cent., composed largely of feeble-minded girls, took charge, under direction, of the helpless inmates, and also by laundry work, earned about forty per cent. of the maintenance of the whole. This proves incontestibly, that given the institution and plant for the protection of such women and girls, the inmates could earn at least a large part of their maintenance.

So much for finance. For the individual—the caged soul—it would be *infinitely* happier, in safe custody and under kindly direction. Instead of perpetual privation and failure, and the hard knocks of an unsympathetic world, they would have pleasant and varied work, such as they have ability to perform successfully, a bright life provided with safe normal amusement, and the perpetual variety, so dear to the

undeveloped mind, and best of all, that blessing which perhaps, they least recognize, shelter from evil and horrible danger.

In the Industrial Refuge nearly one hundred of this class are protected, trained and made happy, while incidentally, they earn a good part of their maintenance by doing laundry work. If like institutions were provided to take charge of the defective *immediately* upon leaving the school for training defective children, for which we are so earnestly hoping, and if these homes were situated in the country upon adequate acreage, yet near enough to some city to carry on laundry work as one department, such industries as sewing, lace-making, rug weaving, chicken raising, market gardening, might be carried on, not only as a means for making money, but as educational factors. We would each and all of us retrograde, without an adequate outlet for our energies, and so do *these*,—grow more dull and depressed and useless day by day, without God's best gift of *work*,—work not beyond their limited capacity, but sufficient to call out the best that is within them, work under the happy direction of a bright brain and a kind heart.

One feeble-minded girl we had here, was never so happy as when making a perfect slave of herself for others. I have known her combat the depressed and restless moods within her, by scrubbing the same floor twice in the course of the same morning. Hard on the floor, but a relief to the troubled brain!

Another most faithful woman we had, simply never could protect herself and had been twice a victim in her early youth, although a woman of exceptionally pure mind. Yet she was invaluable in the institution, caring for the aged, watching over the sick, counting, sorting, mending, mangling, ironing in the laundry, and in hundreds of little ways not merely earning her living, but helping to care for those more helpless. Many others, did beautiful work in the ironing room, and still others learned to care for and take pride in, the machinery. Yet another was for years head kitchen girl, attending to fires and to all the other work of an assistant, with the utmost faithfulness. Two girls of such defective mentality, that when they came to us they could neither dress nor wash themselves, became under training, quite effi-

ent at the mangle, and took intense pride and pleasure in their work, the one operation constantly repeated, being within their limited scope, and yet producing results in which they could delight, and by means of which they could hold a respected place in our own little working world. I might give dozens of such instances, but a few are sufficient.

As a country, our greatest glory and hope is in our sons and daughters, but if a growing percentage of these are feeble-minded and degenerate, we may well write Iehabod—the glory has departed. While our brother's blood has long been crying to us from the ground, breaking the hearts of those who are devoting their lives to the protection of humanity because of the utter hopelessness of dealing only with a few

individual cases when the great mass was perpetually increasing—the hopeful sign is, that broad and earnest minds all over our country, are at last realizing conditions and recognizing the great and terrible need for us to be up and doing before this thing grows beyond our power to control.

The task is set before us—the Augean stables are to be cleaned, or we as a country, will go under. May it be that our dear young Canada will be the Hercules to accomplish this—proving that disease and crime and degeneracy living and growing and breeding its kind, is not a necessary evil, and making it sure that every child born in our glorious Dominion, shall have at least a fair fighting chance, or else be entitled to the care and protection of the State.



Home of mentally defective family. Several children were taken from this home by the Children's Aid Society.

THE NOVA SCOTIA LEAGUE FOR THE CARE AND PROTECTION OF THE FEEBLE-MINDED

By MRS. STEAD, HALIFAX, N.S.

Mental deficiency is recognized in Nova Scotia as a menace to the community. That is the first step towards its abatement. As Halifax is a port of entry for immigrants, it may have been brought home to us, more than other inland places, but the fact remains that through the efforts of the Local Council of Women, with the assistance of the Provincial Government, the general public were interested and roused to the point of forming a league for the protection of the feeble-minded in Nova Scotia. This league is composed of representative citizens, with Dr. C. F. Fraser, of the School for the Blind, at its head. Last year the Rev. John Weir was employed by the league to go through the Province, organizing branch leagues (of which 50 were formed). Through these branch leagues the towns and villages have been reached.

Municipal councils and school trustees have been approached and resolutions have been passed urging the Provincial Government to establish a home for feeble minded persons. For this purpose it is computed that at least \$40,000 will be needed to make a start, but alas, we are told that such a grant has been impossible in past sessions, so many other pressing needs have been before the Government. But this year we hope to make a determined effort to approach the Government in all seriousness, for we have collated an appalling array of facts which go to show that an initial expense, heavy as it might be, would be an economy, when compared with the terrible cost in money, and the infinitely heavier cost in the deterioration of our average population if the children of to-day, who are mentally deficient, are allowed to become in turn the parents of feeble-minded children.

THE DESPAIRING MIND. Despondency.

Diagnosis—

Despondency is to increase an evil, or a difficulty, by a superadded fear and to paralyze the means of overcoming or counteracting it.—Selected.

Remedy—

Be not uneasy, discouraged, or out of humor because practise falls short of precept in some particulars. If you happen to be beaten, return to the charge.—Marcus Aurelius.

MENTAL DEFECTIVES IN ALBERTA

By R. B. CHADWICK

*Superintendent of Neglected and Dependent Children
for the Province of Alberta.*

The proportion of mental defectives to the population of Alberta is unknown. No investigation has yet been made that would give any conclusive evidence as to the number of mentally defective children or adults that come within the meaning of the term "mental defective."

It is well known that there are a certain number of imbeciles and idiots in institutions throughout the Province, and that there are many others who are being cared for in private homes by parents or relations; but it is absolutely impossible to state with any degree of authenticity, the total number in this group of mental defectives.

Those who have dealt with criminals, misdemeanants or delinquents, are quite willing to state that a large proportion of continual repeaters in the class of offenders dealt with by both police departments and others, belong to that enormous class of individuals who are really not responsible for their actions, but the information available can go no further than this statement.

The women officers, whose business it is to deal more particularly with girls under 18 years of age, are quite willing to admit that a normal girl is liable to go wrong under natural impulses, while the mentally defective girl is incapable of distinguishing between right and wrong, and sooner or later is recruited into the ranks of the professional prostitute.

Dr. Goddard, of Vineland, New Jersey, has pointed out time and again, that the mentally defective woman or girl can nearly always find a mate even among normal men.

Case after case can be cited of both boys and girls who have come to the attention of this department during the last four years, which readily illustrate the menace the morally irresponsible mental defective is to the State at large.

Two instances will serve to illustrate this point.

First. A girl who shall be named Jenny for the time being. This little girl came to the attention of the department four years ago. The mother of the child had been deserted by the father, she had had several convictions against her on the grounds of vagrancy, and had served several terms of short periods in one of the Provincial jails. Her life was spent intermittently working and debauching, and she was absolutely incapable of catching a moral viewpoint.

The father of the child received charity in a good many cities of Alberta, and finally deserted his family, at the present time he is in some place in the State of Montana.

Jenny is one of six children. Three of these children are verging on imbecility, and of the three others, two boys appear to be normal, and the girl Jenny, appears to be normal in every respect except that she is incapable of distinguishing between moral right and wrong. Her first experience in a foster home was when she was tried out, and as a little girl of seven years showed a moral depravity that was absolutely appalling. She was taken back to the Shelter and cared for and given special treatment for three months, when she was again tried in a foster home, and again fell down on the same grounds of moral depravity.

The experience of this little girl has been some fifteen foster homes, in each case the foster parents were anxious and willing to take the little girl and give her a chance, and in no instance has it been possible to keep her in any home for a period longer than six months. She is mentally incapable of being taught the difference between right and wrong, and in all probability will continue to stay wrong as long as she lives.

This child should never be allowed to mingle with society at large, because as she comes to years of womanhood she is bound to become a vagrant, and professional prostitute, and an easy prey to any designing beast who will make up his mind to take advantage of the girl's mental incapacity.

The second case is that of a boy who shall be named Charlie.

Charlie was physically very attractive, he was bright as to manner, a good color, good eyes, and curly hair, the head was

could do nothing with him, as he was incapable of being admitted into the normal games of children of his own age, and he had to join in games among children five or more years younger than himself, and his influence over the children was bad of course, and was objected to by the parents.

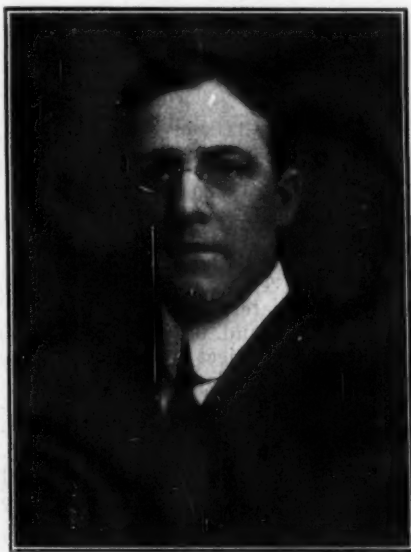
Charlie's next escapade was that of burglary. He seemed absolutely incapable of comprehending the seriousness of his case. In two years eighteen different charges were laid against this boy, and in no instance did he seem capable of comprehending that he had done anything out of the ordinary.

Charlie's history is repeated in dozens of cases.

Under the Binet-Simon system of intelligence tests he showed at least four years behind the standard he should have been able to acquire. Physically he appeared to be normal. There seemed to be abnormal mental development on sex matters, and his record at Portage la Prairie, where he was finally sent, showed that he was absolutely unamenable to the discipline of that institution. Punishment did not seem to have any effect, and his actions were those of an infant rather than those of a grown boy. He was absolutely incapable of concentrating his mind on any effort, as the novelty soon wore off and he looked around for something new.

This type, unfortunately, is far more common than is generally admitted, and cases of this kind eventually develop into a serious cost to the State, unless cared for in institutions which have for their object the segregation of this type, and which will provide them with work, making them self-supporting and absolutely eliminating the possibility of their becoming the parents of others to whom this defective strain would be transmitted.

A case came to the notice of this department during the past year, in which a woman who was the mother of three illegitimate children, came to this country from the back district of Hastings County, Ontario, and was living with a man whom she had picked up in Alberta. This man was of as low a mental type as the woman, and the woman is the unfortunate victim of any man who happens to



R. B. CHADWICK

slightly off the normal in shape, but he was very vivacious. Charlie's history opened up in an Alberta city where he was charged with theft. An investigating report showed that he was at least three years behind his class in school, and that he was the ringleader in most of the mischief of a dangerous nature that was carried on in the class where he worked.

School teacher after school teacher, asked for his removal from the class owing to his pernicious influence on the younger children. His first charge of burglary resulted in his being put on probation, but the "Big Brother" who was appointed to look after Charlie's case admitted that he

come her way. It is impossible to confine her in an insane asylum, as she is not insane. She is of a little higher type than an imbecile and is capable of performing the ordinary duties of her life, but she is absolutely incapable of distinguishing between right and wrong, and feels that there is no harm in her apprehending, or having her children apprehend, anything that she may require.

These children have been a cost to the State from the beginning, and will continue to be so.

The menace of this woman to society, is far greater than if she were violently insane, as the mental defective strain is bound to show in all the children to whom she becomes a mother, and the children in turn will transmit the same defect to their progeny, and this constantly increasing problem will have to be taken care of by the State in the future.

To the knowledge of this department, there are at the present time, from 150 to 200 mentally defective children in Alberta.

In Alberta, the problem is largely an imported one. No mental tests are required by the Dominion Immigration Department, there is merely a cursory medical examination, whereas at least half an hour should be taken for each case, and in many instances children are overlooked altogether, with the result that cases of this kind are brought in from Europe

and other places, and in many instances stay much longer than the time allowed by the Government for deportation before they are discovered at all.

The experience of the United States, more particularly that of the States of New York and Ohio, should be an example to Canada as to what this problem will mean in decreased efficiency and the cost to the community, unless it is faced fairly and squarely.

The cost at the outset is bound to be large, but with each generation is bound to decrease. Mental deficiency will always be with us, but there is no possible excuse for the raising of this unfortunate class merely on the grounds of fear of interference with the personal rights of subjects. The excuse that one frequently hears for the delay in dealing with this important matter, is that it is better that 100 of these unfortunates should be allowed to mingle with society, than a mistake be made, and one child suffering from retarded development be classed as a mental defective. This is an excuse which will not hold water.

Legislators should be brought face to face with this subject and it should be dealt with in a decided and prompt manner. Money spent in eliminating this unfortunate class from society by segregation all over the Dominion, will be returned a thousandfold in the higher mental development and stronger race of people of the future.

MENTAL ATTRITION.

Worry.

Diagnosis—

The surest destroyer of brain-power and nerve-force is worry. No amount of physical vitality or mental stamina can long withstand its disintegrating power.—Selected.

Remedy—

Look out for the bright, the brightest side of things, and keep thy face constantly turned to it.—Jeremy Bentham.

MENTALLY DEFECTIVE PUPILS IN THE PUBLIC SCHOOLS OF TORONTO

By *CHIEF INSPECTOR R. H. COWLEY*

At present there are apparently between 250 and 300 pupils in the public schools of the city that may be classed as more or less mentally defective. With few exceptions these pupils are in attendance at the regular classes of the schools. They probably represent various degrees of deficiency from the backward or retarded condition down through the several grades of the mentally sub-normal and feeble-minded to that of the positively imbecile.

It must be assumed that some of these pupils may be restored to a normal state, that some may be raised to a plane of partial freedom and self help, and that others, and perhaps a very numerous class, should become permanent wards of the state.

While the period of attendance of normal pupils is from 5 to 16 years of age, and while the public school is required by law to provide accommodations for all pupils between those ages, it should be noted in the case of mental defectives that many are not sent to school until they are much beyond 5 years of age, and that for obvious reasons, many should be removed from the public school long before they are 16 years of age.

In other words, the public school, in the field of its usual functions, has meagre opportunity to deal comprehensively with the problem of mental defectives.

Under "An Act Respecting Special Classes" passed in 1911, boards may establish and conduct in any school building, or in a separate school building provided for that purpose, special classes for children who from physical or mental causes require special training and education. With the approval of the Minister of Education, boards may also provide a special course of study.

This Act also confers on the Minister of Education the power to make regulations for the administration and enforce-

ment of the Act, and for the establishment organization, government and examination and inspection of special classes, and for prescribing the accommodation and equipment of school rooms or buildings, and the arrangement of school premises for special classes.

The Minister has not yet exercised these extensive powers, and the Board would be working somewhat in the dark in now proceeding with the erection of a special school or schools for mental defectives, assuming that such a course were otherwise desirable.

The other alternative is to establish special classes for all apparently sub-normal pupils whose attendance can be secured. The regular classes would reap some advantage from the removal of the sub-normal pupils. These pupils would also have a better chance in the special classes. One of the chief advantages of the special classes would be found in the opportunity they would afford for special observation of the pupils with a view to determining their destination. The special classes would serve as clearing-houses between the public school and the custodial institution, which in all likelihood, would be the proper destination of many.

Simultaneously with provision for a system of special classes in the public schools should come the inauguration of a comprehensive municipal plan for the permanent care of all types of mental defectives whose freedom would be a menace to the community. At this juncture the co-operation of provincial and civic authorities might well be invited. It is perhaps worth noting too, that the occasion offers an unusual opportunity for private benefaction. In any event the special classes for defectives in the schools, and a permanent municipal institution of a custodial and educative character are provisions that should be regarded as complementary to each other.

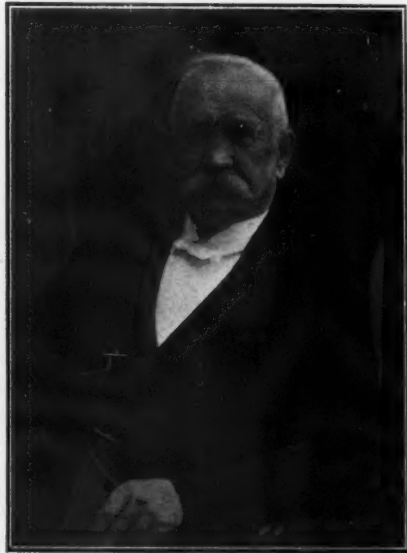
If need should arise for one or more special day schools for certain grades of mentally subnormal children, such schools could be established more intelligently after considerable definite experience has been accumulated.

A preliminary register of those pupils throughout the schools, who are possibly subnormal in their mentality, has already been prepared, and will be of use in indicating the most suitable locations for special classes. Also a copy of this list has been given to the Chief Medical Inspector, who may have some recommendations to make to the Board as to the preliminary and expert examination of cases.

It will hardly be possible, at least for some time, to obtain specially trained teachers for these classes. This is not absolutely essential, but it is essential that the teachers selected be fitted by inclination and temperament for the work.

With the approval of the Department of Education, a specially adapted course would be drawn up.

As the number of pupils in each special class would be about one-third the number in a regular class, the annual cost per pupil would appear to be multiplied by three. But it is to be borne in mind that the special class is not alone a place of training, but a place for special observation of those who, as soon as their grade is determined, will be removed to the municipal institution or elsewhere. Where such removals are effected within one-third of a year after entry, the cost of such pupils will be about the same as that of the pupil in the regular class. If the teacher of a special class passes on three drafts of 15 pupils in the year, the cost of maintaining such special class will be about the same as that of a regular class which passes on its full complement of 48 pupils at the end of the year.



LT.-COL. J. E. FAREWELL, K.C.

County Crown Attorney, Whitby, Ont. The
author of the article on page 236.

FEEBLE MINDED WOMEN IN HOUSES OF REFUGE

By JAMES McNEILLIE

Clerk of the Township of Peterborough

Houses of Refuge were primarily intended for the care of persons of both sexes who had reached an age when they could no longer earn a living, were without means of support, and had no friends who were able and willing to provide them with food and shelter.

Such a purpose is covered by paragraph (a) of sub-section 1 of Section 14 of the Houses of Refuge Act, 1912, which enacts that "Poor and indigent persons who are incapable of supporting themselves" may be committed.

By paragraph (c) of the same sub-section, another class is introduced: "Feeble-minded persons not fit subjects for commitment to Hospitals for the Insane, or to Hospitals for Idiots, but for whom custodial care is necessary."

There are, of course, such persons of both sexes, but section 15 seems to make evident the mind of the Legislature to apply its provisions especially to females of the class referred to. The section is as follows: "Where the physician having the care of the health of the inmates of a House of Refuge certifies that a female inmate between the ages of 16 and 45 years, on account of natural imbecility, is so feeble-minded as to render it probable that she would be unable to care for herself if discharged from such House of Refuge, she shall not be discharged until such physician, with the approval of one of the inspectors of Prisons and Public Charities, orders her discharge."

Doubtless the growing interest in feeble-minded women and the agitation for the establishment of special custodial institutions for their protection during the years in which separation is demanded, accounts for this new provision in the Act.

The class of women referred to were of necessity received into Houses of Refuge before express statutory authority was

given for their admission and detention. Experience had already shown it was better that they should be so limited rather than to be altogether free, but as such detention was not exercised until after irreparable wrong had been done, so far it failed. The fact should therefore still be definitely impressed upon the Government and Legislature until they are led to enact such statutory authority as will anticipate and prevent the evil and far-reaching results of allowing the unfortunates in question to be exposed to temptation and outrage. Even if these women could be taken into Houses of Refuge before positive wrong-doing could be charged against them, in the nature of the arrangements, calling for the admission of both males and females, their safety is not wholly assured.

The writer has had intimate knowledge of a House of Refuge in one of the counties in the Province of Ontario, since the institution was opened for the reception of inmates, eight years ago. The total number of persons received in the period is 198. The number of females is 61, and of these at least 21 belong to the class known as feeble-minded.

In the hope that some fact or suggestion may have the effect of quickening attention to the need for more pronounced legislative action for the protection of feeble-minded women, and respecting the relative question of the marriage of such mental and physical defectives, the writer ventures to refer to several individual cases which have come under his observation.

1. The first inmate of the House of Refuge was an unmarried woman, 19 years of age, who gave birth to a child a fortnight after her admission. A mass of sores broke out on the child soon after its birth, it was sent to the Hospital for Sick Children and there died. The woman was allowed to leave, and unfortunately for posterity she

- married and is bearing children, the paternity of whom is not likely to raise the mental and physical qualities.

2. An unmarried woman, 22 years of age, was committed in the year 1906, and gave birth to a child in the following May. There was ground for suspicion that she had been seduced by her employer in a farm house. At the solicitation of a farmer and his wife the woman was allowed to leave the House in July, 1909, to be their servant. She was returned in August, 1910, and died in the hospital of a loathsome disease with which she had become inoculated during her absence. So far as such a person could be protected, apart from custodial restraint, she might be supposed to be safe in charge of the housekeeper who took her and promised to take care of her. The whole conditions were pitiable, and the fate of the unfortunate woman was cruel. Her father is an inmate of the House, and the hereditary causes are visible.

3. An unmarried woman, 34 years of age, was committed later in the same year, because the frequency of her lapses had become a scandal in the locality where she lived. The experience of the Superintendent and Matron show that the Legislature has not found a remedy by enacting Section 15 of the House of Refuge Act. The woman was kept under such surveillance as is possible, but there were further lapses in association with inmates. She was removed to the Haven in Toronto in September, 1910. The officials could not consent to her return, and she is being maintained in the Haven at the expense of the county until she can be safely taken back.

4. An unmarried woman, 30 years of age, after giving birth to more than one child, was received in July, 1907, bringing with her a child four weeks old. This woman has run away several times, but has been pursued and brought back so promptly that further trouble has been prevented.

5. A married woman, 24 years of age, was received in July, 1908, bringing with her two young children. The husband was a drunkard. After two years, on the earnest request of old neighbors and with the consent of the local municipal authority, the children having been taken by the

Children's Aid Society, the woman was allowed to leave the house to live with her husband, who was said to have reformed. She was brought back in July, 1911, and soon afterwards gave birth to a child. This woman should not have been allowed to marry. Had there been statutory provision for the purpose she would have been removed from her home and protected.

6. A married woman, 22 years of age, was received in November, 1908, and gave birth to a child a few days later. The first public knowledge of the woman was when she was taken in charge by the Children's Aid Society at 16 years of age with a child. She was able to do housework and was so employed in various places, but her propensity caused trouble. Some months previous to her commitment she was married but was soon repudiated and deserted by the man for cause. She was paroled by the Government Inspector in June, 1909, to enter a respectable home away from her former associates. It was reported that the lady by whom she was employed, and who had taken the utmost pains to protect her from the result of evil tendencies, became weary of the effort, and the woman was returned to the House in February, 1913.

7. An unmarried woman, 33 years of age, who had lived alone in a village, and had recently given birth to a child, was received in December, 1911. The woman was almost blind.

8. A married woman, 39 years of age, was received in January, 1914. She was deserted by her husband and her three children were taken by the Children's Aid Society. The woman is an epileptic, totally unfit to care for her family. Statements in a Police Court case show a shocking condition of depravity in relation to one of their female children, who has recently been treated in the Hospital.

All of the women referred to, with one exception, were born and spent their lives in rural communities having accessible schools. All were ignorant so far as education was concerned. If means had been available for removing them in good time from their surroundings all of them could have been trained to some degree of usefulness and saved from moral and physical degradation.

AN OLD TEXT

By MRS. ADAM SHORTT, M.D., OTTAWA

There is a Biblical text much used for the benefit of the last generation, which says: "To know to do good and to do it not is sin." As those who took this to heart grew to adult life and took an interest in social problems, they found that this did not hold good in the case of governing bodies. In fact, that to know to do good quite often meant the bitterness of failure to do it.

For many years it has been quite apparent to every student of social conditions, and painfully apparent to those engaged in social service—whether on Boards of Rescue Homes, Refuges, Havens, Orphan's Homes or whatsoever of that ilk, that the lack of custodial care of the morally irresponsible, the defective and feeble-minded was the most crying social need in the country.

All social problems bear on each other and in part create or sustain each other—but the presence in every community of feeble-minded or irresponsible persons complicates most of all every other grave social problem.

If we could eliminate from our asylums, jails, penitentiaries, rescue homes, houses of refuge, and houses of ill-fame, all the defective and feeble-minded the social problems and the taxes would be very much reduced for this generation and the next.

But these defective and feeble-minded found in the above mentioned and other institutions are just children with their bodies developed, who, because they have grown to this stature (which endows them with stronger passions and endangers them and others the more) are allowed to go loose in every community.

We have a splendid act for the protection of neglected and dependent children which, under able officers, has saved to useful ends many unfortunate children.

Among other things which in this act describes the meaning of neglected children, are these terms: "In circumstances exposing them to an idle and dissolute

life," "who is found in a house of ill-fame or known to associate with or be in the company of prostitutes," "or is in peril of life, health, or morality, etc." Now why, in Heaven's name, do we stop taking care of those who are "in peril of loss of health or morality, who are in circumstances exposing them to an idle and dissolute life," because according to the calendar more years than sixteen have passed over the heads of these unfortunate grown-up children? If there is one phase of human life to-day, that challenges Christianity and the ability of the church, and the governing powers of the day, who know to do good and who do it not, it is the endless procession of morally irresponsible women between 16 and 45 years of age, who once young, once undefiled, are passing constantly in widening ranks through the degradations of the gutter, the rescue homes, freedom, the gutter, the rescue homes or the house of ill-fame.

Two things, clear cut and imperative, are necessary to do, if we would live up to our professions of patriotism and Christianity.

First. To specially teach the defective or backward or feeble-minded, all they can be taught in ways possible to their capacity, and then graduate them from these classes to institutions or farms, where they may be comfortably and respectably housed, fed and occupied living a contented and semi-useful life.

Second. That we deal with the grown-up children we now have on our hands, in ways known to be good, by placing them in institutional care or on industrial farms where, debarred from reproducing their kind, they can yet live out their lives with some measure of self-respect, to their own good and to no man's harm.

After many years of agitation for these preventative and safety measures we now have in a few cities, special classes for defective children, but without any provision for graduation from these into institu-

tional protection and care. And we have an industrial farm near Toronto and two in other parts of Ontario for the care of men.

Provision for the custodial care of irresponsible or feeble-minded females, has, in a measure been indicated in the amendment to the House of Refugees Act of 1912, which reads, "Where the physician having the care of the health of the inmates of a House of Refuge certifies that a female inmate between the ages of 16 and 45 years, on account of natural imbecility is so feeble-minded as to render it probable that she would be unable to care for herself if discharged from such House of Refuge, she shall not be discharged until such physician with the approval of one of the inspectors of Prisons and Public Charities orders her discharge."

This progressive amendment to the Act has not been as operative as it might have been, for two reasons in particular.

First. Because there seems a marked diffidence on the part of visiting physicians to designate who are of the feeble-minded type. It would seem possible and desirable that there should be some tests used which being recommended by the department as recognized and effective tests for certain

grades, would support the visiting physician in his designations.

Secondly. In this same House of Refuge Act in specifying who may be committed to such institutions it goes on to state:

A. Poor and indigent persons who are incapable of supporting themselves.

B. Persons without the means of maintaining themselves, and able to work, who do not do so.

C. Feeble-minded persons not fit subjects for commitment to Hospitals for the Insane, or to hospitals for idiots, but for whom special custodial care is necessary, may be committed.

Unfortunately, however, there is no special organization in the Province whose business and responsibility it is to go hither and thither snatching these grown-up children out of harm's way and placing them under custodial care. If there were some such organization gathering up these neglected grown-up children, and placing them under protection, then the amended House of Refuge Act, of which so much was expected, might become operative to some appreciable extent.

Social workers and charity officers everywhere would hail with hope and relief the work of such an organization.

MENTAL PALSY.

Vacillation.

Diagnosis—

How many do we hear in a day's experience whose chiefest expression appears to be, "I cannot make up my mind!" Mind, indeed! That is only a pendulum which oscillates between "I will—I won't."—M. Lubert.

Remedy—

As soon as we see our plain duty in each thing that presents itself, let us confine ourselves to that, and withdraw ourselves from everything else.—Fenelon.

THE PROBLEM OF THE FEEBLE MINDED

By MRS. WILLOUGHBY CUMMINGS, D.C.L.

*Corresponding Secretary National Council
of Women, Toronto.*

IT was as long ago as the year 1896 that the question of the custodial care of feeble-minded women of child-bearing age was first brought before the National Council of Women of Canada, by Dr. Rosebrugh.

During the annual meeting in that year Mrs. Tilley, of London, drew the attention of the delegates to the fact that in almost all communities there were many girls of this class,—not insane, nor yet idiots, but those whom the country people spoke of as "simple," the girl who seems to be quite unable to take care of herself, and who in consequence in most cases becomes the mother of illegitimate children.

Mrs. Tilley was asked to continue her investigation of this matter and to report to the next annual meeting of the Council. This she did with the result that the importance of the matter so impressed the delegates that a Standing Committee was appointed to gather further information throughout the whole Dominion, and to work in every way possible to secure custodial care for feeble-minded women of child-bearing age.

In 1899 the annual meeting, after hearing the report of this committee authorized the local Councils in all the Provinces to petition their respective Provincial Legislatures to make provision for the custodial care of these poor women, and these petitions were presented except in Manitoba and British Columbia, where the question seems to have been wholly misunderstood at first, for it was said there that there were no "feeble-minded" in the Province, and that there was plenty of accommodation for the insane!

The Committee steadily continued its work in the face of many discouragements. Time and again the Legislatures were approached, but only in two Provinces did the authorities seem to realize the serious

importance of the question. These Provinces were Nova Scotia and Ontario. In the former Province after addressing a large public meeting of the local Council in Halifax, I was asked to have an interview with the Provincial Secretary and others. This interview lasted for over two hours and at its close the Provincial Secretary exclaimed "Why this is a question not of philanthropy, but of political economy, I never understood it before."

In Ontario, the Premier, Sir George Ross, then the Hon. George Ross, and the Provincial Secretary, Hon. Mr. Stratton, while fully alive to the extent and seriousness of the evil, realized the possible legal difficulties that might arise from the commitment to an institution for custodial care until the age of 40 of women who were not insane, and in order to find out how this and other difficulties were overcome in the United States they requested me in October, 1902, to make investigations in some of the institutions for the feeble-minded in the State of New York.

I was accompanied by the Chairman of the Committee, Mrs. Robert Evans, of Hamilton, and our first visit was paid to the beautiful State Home for the Feeble-minded in Newark, N.J., where we spent some days through the kindness of the superintendent and his wife, Mr. and Mrs. Winspear.

The first thing that attracted our notice on our arrival was the fact that there were no walls or fences round the spacious grounds in which stood several attractive-looking houses, while lawns and flowers, vines and shade trees made the place look like the fine country residence of a millionaire rather than a State institution.

"But how do you keep the women in?" I asked Mrs. Winspear, referring to the lack of fences. "It is never a question of

how to keep them in," she replied, "they are so happy, but the heart-breaking time is when we have to send them away when the age limit is reached."

This we realized was perfectly true, for here in most cases they were really happy for the first time in their lives. They are with their peers, no longer objects of ridicule or dislike or something to be ashamed of or treated unkindly as is too often the case even in their own homes.

The houses were graded, those who live in A being almost normal, able to learn slowly many things and to be useful in many ways, while the lowest grade those who were almost idiots. Everything worn in the house except the boots, is made by the inmates, who also do brush making, laundry work, and some other industries which with the fees paid by parents for some of the patients makes the place almost, if not quite, self-supporting.

From Newark we next went to Syracuse to see the State Institution, which had been established then some 60 years before for the development of mentally defective children. From this institution for the last twenty years all the girls have been passed on to the Newark Home when they have reached the age of 13 years. During all the time since the establishment of this school most careful records and statistics have been kept, and by these records it is clearly proved that the children of mothers who had been pupils in the school, before the days of custodial care, were in all cases defectives also, and in most cases a grade lower down than the mothers.

Wonderful results have been achieved in this Institution in the way of developing the brain. Boys who at first could not pick up a large bright colored marble, for example, were doing most creditable sloyd work or tailoring. "They will none of them ever become Rhodes scholars," said the superintendent, "but many will become useful citizens and self-supporting."

Our last visit was paid to the institution in Rome, N.J., which in many respects reminded us of our own institution in Orillia, for the patients were both men and women, and of all ages down to very little children.

From personal observation we realized that there were many reasons why it is undesirable to have both sexes in one institution for the feeble-minded, especially when all live under one roof.

The next step taken by the Council in this part of their work was to urge upon the Ontario Government the need of making an official investigation as to the number of feeble-minded women there were in the Province, and this request was responded to by the appointment of Dr. Helen Macmurehy, which appointment was heartily welcomed by the Council, the Ontario Local Councils promising her any assistance in their power in her work.

On May 21st, 1903, during the annual meeting of the National Council, which was held in Toronto that year, the whole body went once more as a deputation to the Government of Ontario to ask for custodial care for feeble-minded women. We were received most kindly and the matter was promised serious consideration.

Other deputations from the Council have gone to the Ontario Government again and yet again, sometimes with the help and support of other organizations—the last occasion being the deputation organized by the municipalities who are pledged to work for the establishment of County Institutions for the Feeble-minded.

In the meantime the members of the Council feel that they must enlarge the scope of their work so as to try and secure separate classes in the schools for defective children in the best interests not only of these children themselves, but of the normal pupils as well.

If any feel discouraged at the lack of visible success after all these years of hard and untiring effort on behalf of these poor defectives let them look about and realize that the campaign they have carried on for so long has at least been of educational value, and that the general interest which is now taken in the subject throughout Canada is due in part at least to the work and influence of the women of the National Council.

FEEBLE MINDEDNESS A MUNICIPAL PROBLEM

By DONALD M. CAMERON

Sheriff of Middlesex, London, Ont.

FEEBLE mindedness is of so great a variety that no one course of action can possibly solve all phases of the problem its existence presents. But this fact offers no excuse whatever for our having so far, as a community, failed to deal effectively with any of the mental defectives of this class. The existence of mental defectives everywhere within the province simplifies the question of how best to deal with such by recognizing the fact that it must necessarily be one of municipal concern. Nor should our failure heretofore to deal effectively with the question, nor the admitted fact that feeble-mindedness is varied in degree and consequently requiring a variety of treatment on the part of public bodies, be accepted as justification for the criminal neglect of any of these classes by our municipal bodies. The results of this neglect are that there is constantly reproduced a class that in perpetuating its kind lays the community under fresh burdens that might be averted by discriminating segregation and effective supervision.

Feeble-mindedness is essentially a municipal problem because of the reasons stated and can best be solved by the establishment in local centres of homes where segregation would be possible. The legal aspect of the case, the right to deprive the inmate of liberty, presents some difficulties, but none greater than that made to apply in respect to detention in our asylums and Industrial Homes. On the other hand the establishment of homes in central localities such as at present house our indigent poor in the Houses of Industry throughout the Province is only the extension to the feeble-minded of a principle already recognized as necessary in respect of our indigents who are beyond the wage earning age. Our humanity has gradually prompted us to make provision for this class, and what was looked upon 40 odd years ago as an unnecessary burden loaded on the ratepayer, and so strenuously opposed at the time as to threaten the very existence of the Government that purposed to make the erection of poor houses compulsory in each county, is now accepted as a matter of course. Similarly the establishment of homes for the feeble-minded would with us as has

been already recognized in some Western States of the American union, become a necessity to our well being as a community, were a few progressive municipalities to take the initiative. And there is the further reason for urgency in the fact—an urgency not applicable to the case of poor house for the indigent aged—that lack of protection and supervision tends to the perpetuation of the misfortunes which institutional care would avert. We segregate the incapable aged because of our human sympathy. There is an added reason why we should segregate the mental defectives that becomes apparent to everyone who knows how their number is being increased. The municipal problem underlying the dealing with these classes—or the larger number of them—has been simplified, since the adoption in relation to hospitals and sanitariums of the principle of making the municipality where the patient has been for two years a resident, responsible for the cost of maintenance. The great objection in the public mind, at the time of their inception, to the establishment of poor houses was the fear that the indigent would gravitate at once to the counties where such had been opened. The plan of charging for maintenance against a municipality where an inmate resided for two years preceding has overcome this objection if it had ever any force.

There is a class of feeble-minded for which the County Houses of Industry offer all the accommodation needed, and as these are now under Government supervision security is had that they will be properly cared for. The House of Industry for the County of Middlesex at Strathroy has during the 34 years of its existence maintained a varying number of feeble-minded of both sexes as inmates and varying from the age of puberty onward. Such an institution is not adapted to the requirements of all classes of feeble—but experience has shown the suitability of the institution to the needs of those sent there in the past. The House of Refuge would, at the same time prove unsuited to the needs of those who require restraint as well as custodial care. In the cases of such, power of detention by statute and more complete protection would be necessary to achieve any beneficial results.

THE FEEBLE MINDED AND SOCIAL EVILS

By DR. GEORGE S. STRATHY, TORONTO

THE "feeble-minded" question is a cause of the more important modern social evils. The problem of dealing with the idiot and the imbecile is comparatively easy because they are recognized at a glance and treated accordingly by even the most unobservant among the general public. More difficult is the case of the high-grade defective or moron, seldom recognized by the ordinary observer and receiving scant sympathy (save, perhaps, from an intelligent parent or an expert), for the extraordinary acts which he commits without fear of consequence. The appearance of the idiot or imbecile is his safeguard. The prepossessing face and manner of the moron is often greatly to his disadvantage.

The following cases will serve to illustrate the relation of the question to five great social evils of the day, namely, crime, poverty, illegitimacy, disease, and infant mortality:

Case 1.—A boy, eleven years of age, of sullen appearance, but strong and healthy, his father in jail for theft, was brought to the Sick Children's Hospital by his mother for medical treatment. He was a constant danger to his brothers and sisters, in that whenever he was punished he would threaten to wreak vengeance on them and had several times murderously assaulted them. He had smoked and chewed tobacco since he was five years old (an opportunity for the tobaccophobe to point a moral), and showed some a symmetry of the cranium. He was backward at school and very defective when tested. At eleven years of age, under our present system, he is doomed to Central Prison or Penitentiary.

Case 2.—A man known personally to the writer at school, where he was very backward but a good athlete. He was brought under observation by friends who desired to know whether medical advice would be of any aid in preventing his intemperance.

He was a very pleasant mannered, nice fellow, trying to make a living which would enable him to keep up with friends in well-to-do circumstances, but evidently by the aid of an inferior intellect. Several times he had committed criminal acts (such as misappropriation of funds entrusted to him), but was kept out of the hands of the police by well-wishers who replaced the money. Under such circumstances it was his custom to indulge in alcohol to excess in order that he might forget his troubles. Conversation with him revealed evidence of markedly defective judgment, and reminded one of his lack of ability to learn at school.

What was the solution of the difficulty? The man was doing his best to earn an income which would keep him in the circumstances to which he had been used. He lacked both an adequate intellect and the judgment which should have made him realize the inevitable result of his realized dishonesty.

Case 3.—This patient, a handsome girl of twenty-one, came under notice because of an injury to her arm. She talked almost incessantly, and told a number of stories of her employers and others, which in nearly all cases, discredited her own morals.

Her history was gradually elicited. She was the daughter of a solicitor in London, England. She never could advance to the higher grades at school, and when she left school was unable to earn a living at continuous work. She had an illegitimate child at nineteen, and came to Canada under the care of a charitable organization. Here she was employed as a nurse, but her employer found her as unreliable as a child of ten. She was markedly defective, and the tales she told of respectable people (usually those who had befriended her, and of whom she was very fond) were quite without foundation.

The girl's good looks were a menace to her. Her one illegitimate child would undoubtedly have been followed by others had she been allowed to continue to roam the streets. Her cheerful and dangerous carelessness of the reputations of others was a characteristic which was likely to be continued. She was deported, and is now being cared for in a convent in England.

Such cases as the above illustrate some of the ways in which feeble-mindedness may be a menace to the community. That this may be the case in rural as well as urban centres is a fact well shown by a story told by a doctor who formed one of a hunting party in the north country. He and his companions, two Toronto lawyers, were sitting around their camp-fire, and the topic of the conversation happened to be feeble-mindedness. The doctor had dwelt strongly on its evils and their results in a community when he was interrupted by the camp cook who, brandishing a frying-pan, rushed in with the remark, "You're darned right doctor."

The dramatic interruption was explained, when it turned out that the cook was

also a county constable in that district and found most of his work in the not infrequent haling to the jail of one or other of the thirty descendants of three feeble-minded women who had settled in a nearby village.

With the statement that feeble-mindedness has an important effect on infant mortality any physician who has come in contact with feeble-minded mothers will agree. The diets upon which these mothers put their babies and their helplessness in caring for them are to say the least suggestive. The relation of feeble-mindedness to poverty is, of course, well known to students of the subject. An experienced and level-headed social worker recently expressed the opinion to the writer that the great majority of the chronically poor in Toronto are defectives. As such the problem of dealing with them is difficult. Again an alienist expressed the same opinion of the inmates of the Toronto jail. Such remarks, by people who ought to know, as well as one's own experience lead one to wonder less at the futility of the efforts of charitably disposed but untrained persons who pursue the vague ideal of helping the poor.

THE INSATIABLE MIND.

Avarice.

Diagnosis—

Avarice is always hungry.—Anon.

Remedy—

Can it be thought that they who heap up a useless mass of wealth, not for any use that it is to bring them, but merely to please themselves with the contemplation of it, enjoy any true pleasure in it? The delight they find is only a false shadow of joy.—Sir Thomas Moore.

MUNICIPAL RESPONSIBILITY

By J. O. McCARTHY,

Controller of the City of Toronto, Ont.

"A stitch in time saves nine."

IN the field of Social Welfare Work in Toronto there is no more pressing problem at the present moment than that of caring for feeble-minded children. There are, in the Industrial Schools, Homes, and other institutions, at the present time, between one hundred and one hundred and twenty feeble-minded children that should remain in custodial care. These institutions were never intended for this class of children, and their presence there not only renders discipline difficult and impairs the efficiency of the institution, but is an injustice to the children themselves. The conditions outside of these institutions are still worse. There are in the city at least one hundred feeble-minded children that are a menace to the community, to schools, and to their own homes, and that should have custodial care. The saddest stories I have ever listened to in Social Welfare Work have been told me by the heart-broken parents of some of these children. From Havens, Homes, Refuges, and Institutions of every kind, comes the story of feeble-minded children, unspeakably wronged by the community which they menace. The feeble-minded child is a menace to the community, but at the same time the community at large is a menace to such a child.

Under the law it is the duty of the municipality to provide for the education of the child, and, while we seem to have interpreted the law as though it said the normal child it does not say so. The true parent gives the greatest thought, the greatest kindness, and, if necessary, the most of his means to caring for the weakest member of his family. The less able the child is to care for himself the more the parent feels called upon to care for it. The same should be true of the municipality, but it is not. If the feeble-minded

child cannot be given an ordinary education it does not relieve the municipality from giving it the education that it can receive.

The Board of Education in Toronto have indicated their willingness to provide special classes for backward children as soon as an institution is provided for the cases requiring custodial care. These special classes would be a great benefit to a large number of backward children, and while providing ample opportunity for examination and observation, would act as a clearing house. The Board should have power to compel attendance at these special classes when provided. The problem at hand in Toronto is to provide or secure custodial care and training for cases requiring it.

The work of the Toronto Juvenile Court has forced our attention to this problem. The Court, under its probation system, has been splendidly successful for two years in dealing with the delinquent child of normal mind, but it is absolutely helpless under the same system to deal with the child that is feeble-minded, and the work of the Court will be greatly hampered until some provision is made for these cases. We find from the evidence in this Court, as well as from the institutions, that in some cases the feeble-minded child is a great menace morally to other children who may associate with him. After a day of listening to the evidence in connection with a couple of exceptionally bad cases in the Juvenile Court, in which numbers of other children had suffered through associating with one or two of these unfortunates the late Commissioner Starr said: "If the parents of this city realized the danger that these defectives are to the whole child life in the city there would be such a demand for provision for them that Council would be forced to take action."

The feeble-minded child at large is too often the "butt" of the community and suffers sadly. The feeble-minded child in proper custodial care and associated with those of his own kind is relieved from this and has a happy instead of a miserable existence. It would cost the municipality something to make provision for the custodial care of its feeble-minded children. It costs the city much more now to take care of the helplessness, immorality, and delinquency of these same children.



J. O. McCARTHY

The City of Toronto is ready and impatient to deal with this vexed problem. For years the question of responsibility as between the municipalities and the Province has been unsettled. The problem has grown year by year in an ever-increasing degree. Two years ago at a conference representing many of the chief cities and municipalities of this Province a resolution was passed asking the Provincial Government to provide custodial schools and require municipalities to pay for all children admitted or committed until twenty-one years of age, it being as-

sumed that the Government would provide for the adult cases that would have to remain in custodial care. If, in the view of the Government this request is not practical or cannot be granted then authority should be given the municipalities to erect and maintain such institutions.

The necessities of the problem in Toronto demand the carrying out of the following programme:—

1. Special classes in schools throughout the city for backward children.
2. Such amending legislation as will enable the Board of Education to secure attendance of selected pupils at these special classes.
3. Provision by the Board of Education for conveying such children daily to these special classes and returning them to their homes.
4. Provision for careful expert examination and observation of the pupils in these classes and of suspected cases appearing as delinquents in the Juvenile Court to determine the cases that should have custodial care.
5. The securing by the municipality, as soon as authority is given, of a farm at some distance from the city to be developed as an Industrial School upon the cottage or village plan, where feeble-minded children may receive in custodial care such education and training as can be given them.

The municipality is keenly alive to the need of action. It does not need argument nor persuasion, but it does need legislation empowering it to deal with the problem.

"A stitch in time saves nine" and then ninety.

THE FEEBLE MINDED AND CRIME

By LT.-COL. J. E. FAREWELL, K.C.

County Crown Attorney, Whitby

A RAILWAY passenger train, in the County of Ontario, suddenly comes to a full stop, passengers scramble to their feet, and anxiously enquire, "What's the matter?" The answer is, that the engineer, looking ahead saw a piece of an iron rail across the track.

A boy is afterwards tried for the offence of placing an iron rail across the track. His excuse was that he wished to see how far the locomotive would throw the rail. The boy was feeble-minded, and he was acquitted.

A year or two later a farmer hires a boy, for two or three months he did his work so well and was so generally useful, that he was employed at high wages for a year by the farmer. At Christmas time, the farmer and his wife visit some friends, the boy also being allowed to go home and visit his mother. In the evening the farmer returns to find that his valuable barns had been burned, with their contents, at a heavy loss to the owner. The boy first says, that on coming back to the farm he saw some person running away from the barn; afterwards he said that he could not find the key of the house to get a lantern (which statement was afterwards proved to be untrue), and that he had taken an election torch, which he had stolen, and gone into the barn to do the chores, and it got on fire from this torch. The boy was acquitted, on his trial, because he was not mentally responsible for his acts.

This was the boy who put the rail across the tracks. He was detained in the County jail, as dangerous to be at large, until some place could be found for him. He knew too much to be kept in the Hospital at Orillia, or the Mimico Industrial School, and he also knew too much to stay in jail. He broke a lock in the wardrobe and carried off a suit of clothes belonging to a prisoner (for which the County had to pay the prisoner); he escaped, and was

at large for some time; was re-captured, taken back, and after two or three weeks he escaped again, and coolly went to work in the town close to the jail.

In the same County three burnings of barns had taken place about the same time and close together. There being no accidental cause to which the burnings could be assigned, an investigation was held. A young fellow, between eighteen and twenty years of age, gave evidence, and charged the burning of the barns upon a respectable young man in the neighborhood. Superintendent Rogers, of the Provincial Police, made an investigation, and found that the accused was innocent, and that the accuser had not only committed perjury, but as to that particular burning was the actual criminal. He was tried and convicted. He knew right from wrong, but being a feeble-minded delinquent, he could not, nor could anyone else, assign a reason or motive for the offence. There was neither hope of gain nor a desire to revenge some wrong, for he had no ill-will against the owner of the barn.

In the same County a farmer's wife employs a neighbor's daughter to look after her young child, two or three years old. In a short time the child's eyesight was completely destroyed. The girl who did the mischief, was feeble-minded, crafty, and cruel, and should have been restrained and prevented from doing other mischief. Two or three years afterwards, a farmer's wife, living five or six miles distant, but in the same Township, needed help, and this girl was employed. She and her husband being away from home, their infant child was left in the charge of this feeble-minded girl. The infant was in perfect health at noon when they left their home. On the return of the parents, their child could not be found. The feeble-minded girl would not give any account of the infant. Its body was found dead in a distant grain field, where the

infant could not and would not have gone alone. The postmortem examination, held some time after the death, revealed no cause of death. There was a strong suspicion that this legally irresponsible girl was the cause of the infant's death.

Another family in the same County had feeble-minded children. There were inter-marriages of these children. When they grew up, result, deaf and dumb issue, of criminal tendencies, trials for bigamy, etc.

Years ago in the same County, a feeble-minded married woman, weak morally and intellectually, was visited by a couple of young men during her husband's absence, and was so ravished and so brutally treated by them that she died. Result—a murder trial and both the men sentenced to be hanged. They were afterwards sentenced to imprisonment for life, and in three or four years, discharged from Penitentiary. Subsequently one of them was lynched in the Western States; the other is an exile with a warrant for rape outstanding against him.

Still later a feeble-minded girl, just over sixteen years of age, was got into a coal office, in a coal yard, and stopped all night with three men, all of whom confessed to gross immorality. The girl was described by Dr. Bruce Smith as "A high-grade imbecile," and on the trial of the men, the doctor had to admit that the girl had a certain amount of ability, and the use of her mental faculties, to such an extent, that unless a person was pretty well acquainted with her, her irresponsibility would not be apparent, and that a person with slight acquaintance with her, who would be guilty of an offence against the Criminal Code, if she had been sane, would not be liable for such offence upon her as an idiot.

The above cases are a few of many which, as a County Crown Attorney, I have had to investigate. I am satisfied that a careful examination of all cases, where the Criminal Law has been violated in the last forty years in this County by this class of people, and a proper computation of the amounts, which the apprehension, trial, and detention has cost this County, and added to this the value

of property destroyed by them, would so startle the ratepayers that they would not hold their peace day or night, until the legislators were aroused to the necessity of taking efficient measures for the proper detention of such people and for preventing the bringing into the world issue of such unfortunates.

They certainly should be detained in custody until, by a proper system of training, they might be set at liberty.

Education alone, will not do this. Carefully prepared statistics have shown that over \$5,000,000 have been expended in the City of New York uselessly, in trying to educate these feeble-minded persons. Prior to 1897, the Hospital for Idiots was established in Orillia.

Every person connected with the apprehension, prosecution, and trial of offenders against the Criminal Law, knows that cases are continually occurring in which there is no motive for the committing of offences complained of which can be ascertained, and that there was no accounting for many offences so committed.

At the sitting of the National Charities and Correction Association at Toronto, attended by delegates from every State and Province in Canada and the United States, attention was drawn to the feeble-minded delinquents, who were often high-grade, irresponsible imbeciles.

The exhaustive exposition of this subject by Dr. F. M. Powell (Principal of the Iowa Institution for the Feeble-Minded, and Chairman of the Committee on this subject at the Convention), and the discussion upon his report was a revelation to Canadians. The number of these people was estimated at 1 per cent. of the whole population, making in all 700,000 in the United States. The fecundity of females of this class was pointed out, and the danger of its enormous and rapid increase, was referred to.

The danger from the existence and rapid increase of this class had, at that date, received far more attention in Germany, Norway, and Sweden, than in Great Britain. There were as many institutes for the care and treatment of these people in Norway and Sweden as in Great Britain.

RURAL COLD STORAGES, A SCIENTIFIC AND ECONOMIC NECESSITY

By P. H. BRYCE, M.A., M.D.,

Chief Medical Officer, Department of Interior, Canada

Presented to the International Congress on Refrigeration, at Chicago, Sept., 1913.

IT is doubtless acutely present to the minds of all persons who are handlers of cold storage goods that the general public and some of their representatives in Parliament—not perhaps those most responsible for legislation—have developed serious prejudices against food which has been in cold storage. The causes for this as given are two; first the quality of the goods supplied to the consumer is deteriorated to a greater or less degree; second, the prices paid for such goods are excessive and made so by cold storage methods. Without arguing *pro* or *con* regarding such prejudices, I shall endeavor by turning to the biological and physical facts, which bear upon the situation to show therefrom that, however much good to the public has resulted in the past from present refrigeration methods, their application has only partially succeeded in fulfilling all the scientific requirements demanded by the recent increase of knowledge on the subject of refrigeration. A few illustrations may suffice.

It is now quite within the limits of practice to have milk, taken at the stables in the country, at once cooled, placed in the ice storage room and maintained on the farm without any bacterial increase in the milk for at least a week. It may interest some to know that as far back as 1891 the writer had experiments carried out at a farm near Toronto with a hundred cows, and the following results were obtained:

1st—Milk taken directly into sterilized test tubes gave only 15 bacteria per c.c.

2nd—Milk taken from the can of mixed milk from different cows gave only 720 per c.c., and,

3rd—The cooled milk after placing in the bottles gave only 1,640 per c.c.

These milks were subsequently placed in the dairy cold storage at 40-45 degrees F.,

and kept for two days, and then tested for acidity, illustrating any bacterial increase by a deci-normal alkaline solution with the following results:

Oct. 7—The milk of six cows gave normal acidities of 0.95, 1.06, 1.27, 1.12, 1.20, 1.09, 1.11 average.

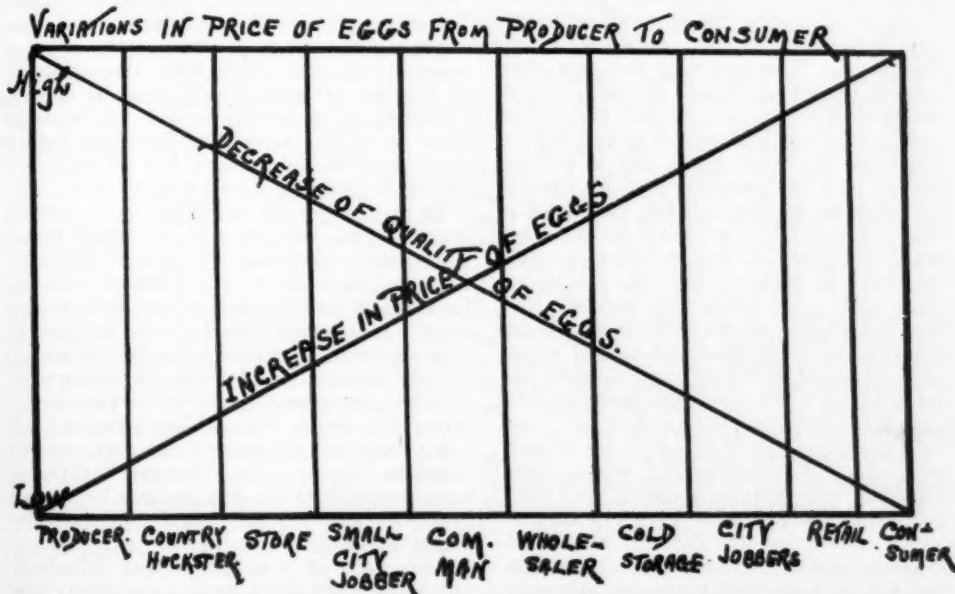
Oct. 11, (four days after)—The same samples gave the following: 1.10, 1.50, 1.00, 1.00, 1.11 average.

During these same experiments it was shown that milk kept for a number of days and not showing more than 10,000 bacteria c.c. after being placed in a room of 80 degrees, for six hours showed a bacterial count of as high as 1,000,000 per c.c. In view of the facts proven twenty years ago we need not to-day question the common experience that cold applied to milk, handled properly, is the easy and natural method of handling all public supplies. We have in the beautiful experiments of Dr. Mary Pennington, attached to the Bureau of Animal Industry, Wash., the story of cleanliness and cold in preserving poultry and eggs perfectly demonstrated. She has shown that the careful killing and plucking of poultry can be carried out within a period of five minutes and that the birds sent at once to the chilling room, where their temperature is reduced within twenty-four hours to 30 degrees, has solved the whole problem, as in the chilling of meats, maintaining them in perfect condition for weeks together. For the last twenty-five years the same practices applied to the meat slaughtering industries of the United States have developed industries which have been the admiration and envy of the whole world, and only to-day have the teachings of the great abattoir companies been fully extended to other great meat-producing countries. Similarly, the pre-cooling and maintenance

of sub-tropical fruits by refrigeration methods has placed the whole northern world of North America and Europe under an indebtedness, not yet fully appreciated, through the possibility of supplying these countries to an extent and perfection never dreamed of a few years ago.

I turn, however, to the problem as it exists in these very districts so supplied, and find them to-day still struggling with the problem of whether 50,000 or 1,000,000 bacteria per c.c. shall be the permissible number in city milk supplies, and whether they can insist fairly upon milk being delivered at the city depot with a temperature as low as 60 degrees in hot weather. We find it still the practice for commission men to go to the country markets and purchase dead poultry, more or less good according to accident, and ship such, subject to the rough usage and delays of transportation, to their city cold storage warehouses, where they are put in cold storage either chilled or frozen to be later put on the market in "short" seasons, when they are tolerated as good food often because nothing better is within reach. Similarly, in the matter of eggs, the most universally cold stored food and most widely in demand at all

seasons, we see the extreme importance of the problem we are discussing, when laboratory experiments tell us that the expert can detect tissue changes in the eggs within twenty-four hours, if it has not in hot weather been rapidly cooled from 103 F. to below 50 degrees F. We are all familiar with figures showing the hundreds of millions of dozen of eggs demanded each year on this continent, and yet we know that in the States, or in the Provinces such as that of Ontario presumably advanced in agriculture, there are as in the whole district between Toronto and Montreal, only a relatively few egg collecting circles, and these mostly controlled by one or two large packing houses. I fancy that the farm ice-house and refrigerator are relatively equally rare, and I am certain that this is true in at least one district which I am perfectly familiar with. There was at the International Health Congress at Washington last year an instructive exhibit by Cornell University, with the following diagram illustrating studies in nutrition. In this diagram the significance to me lay in the fact that from the egg producer to the egg consumer there were ten different persons dealing with the



selling of it, and to-day under present methods both the producer and the consumer seem to be the helpless victims of the forces wholly beyond their control. I am informed by a poultry expert, who witnessed the cold storage methods in a large Montreal packing house, where each egg was candled, that in the month of May last year at least twenty per cent. of the eggs were proved unfit for cold storage, and hence we need not wonder if, under such favorable circumstances one-fifth of the eggs had undergone bacterial changes, that the general public are forced to pay too often wholly unnecessary prices for a quite inferior article.

The trade terms, "new laid," "strictly fresh," "fresh packed" and simply "eggs" sufficiently indicate what all know to be the real facts regarding existing methods. It is apparent, then, that by whomsoever carried out, whether the city warehouse man, the farmer or combination of farmers, a complete change in existing practices in handling food products intended for wide distribution is urgently demanded both in the interests of public health and public economy. Both producer and trader are too often to-day troubled with the old bugaboo that if there is too much food then prices and profits will decrease. Viewing the proposition broadly, however, this is absolutely false "economics," for assuming that any given million population should demand, that is, require a given amount of food, it is apparent that cutting this amount in two has not increased the total value, *but it has deprived half the population of an amount of potential working energy contained in the food, and hence, society is by this much made less energetic and therefore less productive.* A besieged city on famine rations, costing ten times their normal price, has, indeed, its soldiers badly equipped for maintaining a physical and mental resistance adequate to defend their hearths and their homes. We need not, however, discuss this mistaken view further, but need only point out that if every pound of milk produced and every egg laid were at once placed at the farm in a simple cold storage room, made possible by a few tons of winter stored ice, the farmer would become the first agency, not alone in producing, but in maintaining an adequate supply for the people, and in keeping such

supplies in a manner, by which their future freshness in the long journey to the consumer would practically be guaranteed. These two foods so readily subject to organic changes only serve, however, to indicate the degrees of necessity for handling all food products at the local centres where they are produced. I fancy that the outcome of scientific methods in handling our meat supplies through the great abattoir companies, which have grown up during the past twenty-five years will not be accepted by any of us as the best solution of preserving and distributing such to the consumer, when, as in my own Province, there scarcely exists a single abattoir or slaughter house between the two cities over 300 miles apart, and the local consumer in the town between sees the cattle shipped to these abattoirs only to be returned to him for consumption after having been slaughtered at a distance of hundreds of miles and having paid the cost of transportation in two directions. Clearly, there ought to be something better for such consumers, for the farmer or his employee who grow the cattle and find it inconvenient to slaughter them at home, than to have to go to the near by town or village and buy back it mayhap the very animals reared by them. They certainly manage things better elsewhere. Thus in Denmark, with a population about the same as the population of Ontario (2,500,000), there were, in the last report received, some 70 large abattoirs equipped with ice machines, while there were 210 more establishments supplied from these abattoirs, but all equipped with refrigeration of some sort.

In the matter of handling milk products, I find, further, that Denmark had 1,358 butter factories, of which 151 had refrigeration machines and 1,040 had other ice supplies *on the basis of one pound of stored ice for every pound of milk handled.* I further find that in the last census period the population of Denmark had previously been about two-fifths urban and three-fifths rural, maintaining practically this proportion throughout the ten years. Compare this with the Province of Ontario, which in 1911 was lacking twenty-five per cent. of the rural population which through natural increase and immigration it should have had, or with Illinois, which lost 111,000 of rural population in the same period, and we can easily under-

stand that some influences are at work in the two latter districts wholly inimical to the real interests of the community. Such a situation does in fact supply much food for thought to the people both of the United States and Canada, since the question of their food supply is directly associated with it. It is scarcely conceivable that if the farmers in these two countries felt that they were being remunerated adequately or comparatively with the men who buy their stock, their cream, eggs or butter, that they would not continue to produce the same in increasing quantities. We find, in fact, that such are not being so remunerated, and as we have seen there are too many hands each securing a portion of the price as middlemen, which has to be paid by the consumer.

From a national standpoint, the problem is one crying out for a solution, and I know of none except along the lines of local co-operation as illustrated in Denmark. For instance, I find in one of this month's agricultural journals an illustration of the extent and refinement to which a fair division of profits goes on at the bacon factories in Denmark. The Royal Danish Experiment Laboratory, recently investigated what was causing jealousy among the farmers, viz., the relative weights of the "hog" carcasses and the "plucks," at the abattoirs which vary greatly in weight according to whether they are cut out with or without the tongue, etc.

Thus in four different factories, where 100 hogs averaged 155.7 pounds of slaughtered weight when warm, experiment established that the farmer was to be paid at once according to the slaughtered weight, after the removal of 63.9 pounds of tongues, 100 pounds of intestines, 94.6 pounds of midriff and 403.7 pounds of pluck and intestinal fat. These amounts were afterwards to be worked up and paid to them later as surplus; but the farmer was to be paid actually 152 pounds per hog. A careful estimate given shows that the slaughtered carcasses gave 18.83 per cent. of by-products and 81.17 per cent. of prepared bacon. Compared with such methods one may illustrate the American and Canadian method. The 1911 Ontario Bureau of Statistics gives the following:

Ontario.

Total cattle for the years 1907 and 1911 with value were:

	Total cattle on hand.	Value.
1907	2,926,236	\$79,485,780
1911	2,593,205	84,634,962

Total sheep for the years 1907 and 1911 with value were:

1900	1,727,000	
1907	1,106,083	\$5,928,325
1911	1,040,245	6,213,021

Total swine for the years 1907 and 1911 with value were:

1907	2,129,944	\$21,600,459
1911	1,963,937	25,318,455

The following figures taken from the census of 1911 show the proportion of animals slaughtered and the capital involved in the abattoir business in Ontario.

Slaughtering and Meat

Packing.	1901.	1911.
Capital	\$3,588,861	\$7,497,926
Salaries	662,500	1,253,468
Cost of materials..	15,499,125	24,255,180
Value of products.	17,216,069	28,115,444

But someone says: True! Ontario cattle, sheep and hogs did *decrease* during the period, but the packing houses bought additional supplies from Chicago and elsewhere. I find, however, that the United States in 1911 exported to all countries only 256,096.00 of fresh pork, while the exported beef from the United States decreased, 1909 to 1911, from 99,700,000 pounds to 28,700,000 pounds; or if we prefer to take the imports to Great Britain as the measure of the falling off of meat products in the United States and Canada we find that whereas the United States sent £47,573,092 worth of total food products in 1907 she sent in 1911 only £34,413,176 worth. During the same period Canada's total exports of food to England decreased from £31,594,763 worth of food to £14,192,916 worth.

We find, in fact, that with the enormous aggregation of capital and specialized methods, such great firms as Swift & Com-

pany, have been able to enter Canadian centres and develop within a few years their great packing houses to the almost total extinction of others, and, similarly, within ten years, have been able to develop in the Argentine a plant capable of handling 1,500 tons of refrigerated products daily and a killing capacity of 6,000 sheep and cattle. *In fact, these establishments practically are only limited in their output by the available supply of raw material, as is being abundantly illustrated in Canada.*

But nothing further needs to be said to illustrate the situation. The older Provinces of Canada and the States of the Union *see yearly a declining production of food products, a decrease yearly in rural population and a daily increasing consumption and demand for new food supplies.* I cannot conceive anything more detrimental to the larger interests of the producer than to see him separated from a direct interest in the manufacturing of his own raw material and his obtaining a fair share of the profits therefrom. How long such methods as those at present in existence shall continue can only be determined by the realization of the situation and the necessity, judging from the results I have indicated, for some radical change in methods. It may seem to those in command of unlimited capital in Chicago or elsewhere a purely visionary idea for us to think of stimulating the meat industry by *seeing a goodly number of cold storages in the local centres where animals*

are grown; but when the effects resulting in declining raw supplies and ever soaring prices are seen by such an assemblage as this, none can be surprised if the question arises of whether or not some readjustment of existing methods along the lines indicated may not be forced upon our communities. The conservation of the food supplies of the people is as intimately associated with a propaganda for stimulating the means of their production as is the conservation of the lumber supply of the country, with not only controlling the cutting of small timber, but also the reforesting of denuded areas.

I am more than ever convinced that if our manufacturers will investigate the situation in different rural districts and will place their capital and business experience alongside the knowledge and ability to grow supplies and thereafter prepare them for market, whether in the matter of the pre-cooling of the fruits, in the slaughtering and preparing of the by-products of animals and in the refrigeration of poultry and local cold storage for eggs, they will have taken the first real steps toward reconstructing and promoting the prosperity of the rural areas whether of our older States or newer Provinces, while at the same time they will have greatly increased the quantity and enormously improved the quality of our cold storage products, and without decreasing profits will have mitigated at least in some degree existing evils due to deficient and defective food supplies at excessive prices.



CHRONICLES "EN ROUTE"

By FLORENCE WITHROW, B.A.

A CHRONICLE "en route," we presume, may aptly commence from the moment one emerges from one's own front door, when the "perils of travel," at once begin. A huge icicle struck our head and slid coolly between our arms, which stoutly clenched a sturdy club bag. We wondered if this icy presence was an augury that there would be some chilly member in our party. Let us assure the reader that presage was false, for a more amiable group never set forth to "be'old the world so wide."

The "hold ups" to which we are now quite accustomed, occurred en route to the station, viz., a street car blockade and a huge moving van obstruction. We never yet reached the depot without some part of the world "moving" with us.

A forty minutes' delayed Chicago train gave ample time for reiterated adieux. Parting appeared to be not "sweet sorrow," but rather "limpid sweetness long drawn out." A handsome box of Cole's best confections aided this. Reminiscences of Toronto's old Union Station afforded one topic of conversation, for there we were in the dingy downstairs waiting-room of the old building. A worse kept, worse lighted, worse ventilated room it would be hard to find.

A tourist conductor's chief nervousness in an entire trip, is the first hour "out," when, friends having departed, the party is set to getting acquainted. The conductor wonders will they like each other, and forecasts three long months of intimate association.

Our C. P. R. sleeper was of the latest design, with no less than three glass panes to each window. By ten the next morning we were in Chicago. The "Windy City" is a misnomer. It should be termed the hurricane city, for both physical and human elements exhibit excessive velocity. Lake Shore and Midway Boulevard drives should be taken in hermetically sealed vehicles, for ordinary closed taxis focus the four drafts of heaven right around one's head.

Our brief day in Chicago being devoted chiefly to a visit with friends, we had no time to "do" this great metropolis. However, through the courtesy of Mr. Williams, representative of the Chicago and North Western Railroad, we were escorted on a tour of inspection through their vast new terminal.

It is the most modern railroad station in the world, and is a monumental triumph, not only of railway achievement, but of architecture. Once it was erroneously thought, despite Ruskin's teaching, that beauty and utility could not combine. This mighty railroad depot proved the falsity of such an idea. The Railroad Company themselves state that "the aesthetic value of architectural beauty has come to be recognized as a potent factor in race development." To the millions who will tarry in this station, even to the humble immigrant, the classic beauty of this noble structure will awaken a love of the beautiful.

The front portico has six Doric columns of Maine granite. The four storey facade is early Italian renaissance in design. In the lofty main waiting hall is a stately colonnade of green Cippolino marble, with the walls, as a background, of delicate pink marble.

On the street level is a richly tiled vaulted lobby, where are situated numerous offices. On a level with the trains is a series of beautiful waiting rooms, lunch and dining rooms. The train sheds are built on the newest plan, with an open air shaft—or vent—the length of each track, through which the engine smoke escapes. Why our ancestors swung arched girders covered with soon blackened glass, seems now incomprehensible, but one law of invention seems to be from the complex to the simple.

The Terminal's third floor is practically a metropolitan hotel. Every conceivable comfort is provided—rest rooms, writing rooms, ladies' tea rooms, baths, barbers, hair dressers, manicures, emergency and

hospital rooms, in charge of a physician and staff of trained nurses. No charge is made for medicine or doctor's services. Only 25 cents is the cost of the luxury of a bath. Surely the traveller need be no longer travel-stained and weary. Laundry tubs and drying racks are provided for immigrants. Even the suburbanite is considered. He may rent a locker for his evening dress and engage a private robing room.

Forty-eight electric clocks proclaim the hours. Automatic sign boards announce the trains. Self-acting red-cap "ushers" (better rushers), rush the confused traveller whether he wills or not.

The station has its own lighting, heating and ventilating plant. The air is washed, cooled or heated according to the season, and is changed three times an hour. An endless belt carries the mail direct from the trains to the post office. A wonderful combination of utility, luxury and beauty is this great R. R. Terminal.

Being a woman we could not resist a glimpse at Marshall Field's vast emporium. Their commodious bus awaits the traveller at the railroad station. At the store an usher conducts her to the check room. Disencumbered of wraps and club bag, she roams at will through a veritable Paradise, for what woman does not love pretty things, artfully and artistically displayed. Spring-time decorations were in profusion. We hardly needed to continue our journey to Japan, for here were bowers of exquisite wistaria, iris and cherry blossoms.

Almost the entire seventh floor is occupied with tea and dining rooms. The wedgewood room was a gem of classic loveliness. Dainty Greek nymphs and fawns decorated the panelled walls. The table tops were ebony, with little white relief figures at the sides. In the heavy oak Elizabethan dining room a master picture was on exhibition, representing Alexander the Great and Thais at the destruction of the Persian city of Persepolis. The art gallery is no mediocre department, but contains chef d'œuvre of American artists and many foreign gems, not to mention the world's best reproductions.

As another evidence of Chicago's wealth, we must mention the interesting information that Mr. O. Armour, who has an es-

tate at Lake Forest, Mich., comes to town each day (35 miles) in his own airship. There is a prediction that votes will come to women when men fly. The time is not far off.

At 9.30 p.m. we boarded the train for San Francisco on the splendid Chicago and North Western Line. Our sleeper was steel built. These steel cars are called "wreck proof." A heavy metal shaft runs underneath the entire length of the car. It would require a tremendous shock to bend this. The interior of the coach is more commodious than other sleepers. All the supposed woodwork is really steel, skilfully treated to imitate mahogany. The ventilators contain no glass, for in a wreck glass causes much damage. Absolutely the only wood in the entire car is the window frame.

The journey via Omaha and Ogden is through monotonous prairie until the Rockies are reached. Next followed Salt Lake, 89 miles long. The train traversed a filled in roadbed right across the lake for seven miles, then further on it passed over 14 miles of trestle above the water. The difficulties encountered in building this road were appalling. In climbing to the summit of the Sierra Nevadas, 40 miles of snow sheds are passed through—the heaviest and "handsomest" snow sheds we ever saw. In summer the strong slatwork, framed like a fence, is taken out to give a better view.

Within an hour of Iceland (as one summit point was named), we were down to orchard valleys, another hour brought us blossoming trees, and violets beds. The change seemed phenomenal. But sure enough California was smiling and green and flower-laden. The train conductor entertained us with marvellous figures. In the Imperial Valley, 300 feet below sea level, eight crops of alfalfa were grown in a year. In another valley, 1,800 acres of asparagus realized one million dollars. Forty thousand carloads of oranges came from another section. We simply gazed and wondered. Surely this was the garden of the Hesperides.

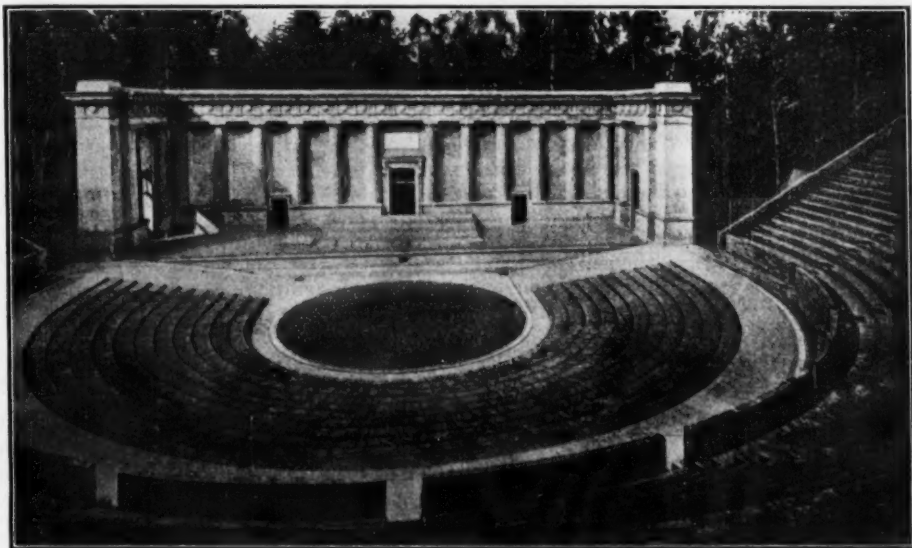
Three days for greater San Francisco, including Oakland, Berkeley and Alameda, was all too short. "Strenuous in extremis" was the order of each day. Yet by means of sight-seeing motors it was amaz-

ing what we accomplished. One day we "did" three separate and individual motor trips. Never were three American dollars better expended, nor was the time in "doing" a city better spent.

The morning route covered practically the best down town section. Phoenix-like has it sprung from the ashes of 1906. The devastation of that time cannot be imagined, nor can the marvellous restoration of that mighty fallen city be described. It is simply a parallel of Kipling's "Prophet of the utterly absurd, of the potentially impossible and vain—for the thing that couldn't actually have occurred," and a more magnificent city stands to-day on the

one is a cable car line, running at an angle of 37 degrees, the down car operating to force the other up.

Golden Gate Park is one of the largest in the world (1,013 acres). It contains almost every variety of natural beauty. Difficult is it to realize that once these richly wooded acres were sterile sandy hills. Every tree was planted and is kept growing by irrigation. The roads are perfect and require "anointing" with crude oil, but once a year. Miles of bridle paths afford excellent riding. We saw more equestrians during our glorious motoring drive than we have ever seen at one time in Rotten Row or in the Bois in Paris.



HEARST GREEK THEATRE—UNIVERSITY OF CALIFORNIA

ruins of the old. Noticeable features are the wide thoroughfares—rounded corners, wedge-shaped converging streets, showing the handsome buildings to greater advantage. Along Market street we saw the pitiful sight of the army of the unemployed starting to walk to Washington. Many, we fear, were "I won't works."

The new Nob Hill is crowned with millionaires' mansions, and the palatial Hotel Fairmont, which claims to be the most expensive in the world. San Francisco boasts of more hills than storied Rome. On

The dilapidated Cliff House, the rusty old seals, and an ostrich farm of bedraggled birds still attract the tourist. We recalled Hamilton Wright Mabie's description of these "fearful wild fowls." No lady with her lorgnette could "affect" such a scare as they. As to digestion, they might eat a car ticket, latch key or motor goggles.

Beyond Sutro Heights, following the coast to the Golden Gate, which means the strait connecting the Pacific Ocean and San Francisco Bay, lies the Presidio (Span-

ish post 1776). It is now a U. S. military reservation of 1,542 acres. More than half is covered with groves of pine and eucalyptus. It contains parade grounds, barracks, hospitals, officers' quarters, harbor defences, etc. The very pretty homes of retired officers show that Uncle Sam makes generous provision.

The Presidio will be used in part, as well as a large stretch of made land, for the Panama-Pacific Exposition. A better site is inconceivable. This gigantic enterprise is to cost \$50,000,000, and will be well worth a visit. Already the mammoth buildings are well on in construction. Canada is erecting the second largest foreign building, which will worthily represent our vast Dominion, and is a fitting evidence of the cordial relation between the two sister nations. May they ever continue sister but separate nations.

The Exposition grounds command both Ocean and Bay. "The heaviest warship can enter on all tides. Not only could all the world's navies ride upon its waters without crowding, but the merchant fleets as well" San Francisco Bay is 70 miles long and 5 to 15 broad. Including the north end, which bears other names (and has train ferries carrying 20 cars and four engines) there is 400 miles of shore line.

Of course, Chinatown engaged our attention. Its population is 23,000, exactly half what it was before the fire. A Chinaman is absolutely barred entrance to the United States save as merchant, student or gentleman traveller. The working man cannot even pay a head tax and thus gain admission.

One amusing experience we had visiting the fire curio shop of Mrs. San Wan. She is an American woman, who married a Chinese cook. They have a miserable little shop of junk collected from the fire ruins, but these we were not permitted to inspect until it suited Mrs. San Wan. With a scowling face and commanding air, she forced us to take seats exactly in order as we entered. No irregularity or jocularly did she permit. Having us seated, trembling, in a row, like nine pins, she proceeded to bowl us down with cheap curios at exorbitant prices. Some compromised by buying a photo of herself with her heathen Chinese—price 15 cents each—a trifle high, but, of course, one should pay for her auto-

graph, which read—"Mrs. San Wan, nee Lucile Clements, own sister of Mrs. Howard Gould (actress)". The Gould name is what this crabbed person trades on. A more disagreeable "lady" it never has been our pleasure to meet. Since we did not buy she would not let us even look, but bundled us out with little ceremony. All we could espy of the junk collection was a blue-beard row of hairless china dolls, a festoon of several hundred partially melted cups and plates, and some distorted gem jars. Evidently they had plundered a china shop. The spoils of egg cups, china napkin rings, etc., were arranged in ornamental designs, but we did not think these half as tasteful as skull and crossbone decorations.

We must hurry on to the cities across the Bay, taking a ferry that seats 3,000 and has standing room for half as many more. The ferry slip at Oakland is at the end of a three mile mole, one of the longest piers in the world. Steel electric cars, with side entrances, start from this point to four independent municipalities. Two are surprisingly industrial, Oakland and Alameda; one, Berkeley, is educational, being the seat of the University of California; the fourth, Piedmont, is entirely residential. Here one could not buy even a tooth brush or a paper.

The University, in all faculties, has 8,000 students, 48 per cent. of whom are women. The co-ed is here a welcome factor in University life, and her record warrants her right to exist there. Tuition, except in certain professional courses, is absolutely free. The open air Greek theatre should be mentioned. Its seating capacity is 10,000. Old Dr. Durand, who went out from Yale in 1863 to found a university in California, builded greater than he knew.

California is a land of lovely homes, largely of the bungalow order, embowered with shrubbery, vines and flower beds, which bear blossoms all the year round. We wish we could describe some of the beautiful suburban houses, with their picturesque timbered balconies and trellised arbors, be we must not forget this sketch has Honolulu yet to treat.

The sail to the Mid-Pacific Hawaiian Islands was in the big Mongolia of the Pacific Mail Line. She is a splendid ship,

with the best deck space we know. This was designed especially for tropical waters.

The stewards and crew are Chinese. This race has been maligned, for we found no "ways that are dark and tricks that are vain," but the utmost civility and desire to serve. Our "boy," or steward, could not do too much for us, but we had to do considerable to explain what we wanted.

A moving picture troupe on board astonished and amused us. With pencilled and painted faces they acted out some melodrama on the deck. Tragedy ran high when the villain actually leaped overboard, (but was rescued by waiting lifeboat.) The bleached blond heiress wavered whether to faint or to crawl through a porthole. We were learning how "movies" are really made. An expensive way, we thought, to take 20 people to Japan to depict some sordid and ignoble story.

"Tangoing," we found, was popular at the deck dances. A few steps may be called pretty, but there was also much lack of beauty and grace. Oh! that our taste could be more classic and less vulgar. We contrasted Isadora Duncan's graceful Greek dance movements with the immodest modern Tango adaptations. Is it not deplorable that we have grown so coarse and vulgar in so many of our tastes—in dress, amusements, eating, and kindred matters. Who will deny that ours is an age of much vulgarity.

Our sail through the Sun Belt into the Tropics was a perfect delight. It surely was "drifting to Paradise on an even keel." The sea could not have been calmer or bluer. The Hawaiian group lies within the Tropics 2,080 miles from San Francisco. Of these "Summer Isles of Eden" Mark Twain says: "No alien land in all the world has any deep strong charm for me but this one, I am enthralled with its balmy air, its summer seas, its pulsing surf, its leaping cascades, its plummy palms drowsing by the shore."

According to record, it has a climate all its own. Its temperature varies not more than ten degrees during the day, and ranges during the year only from 55 to 85 degrees. "Sweltering heat or biting cold are unknown; sunstroke is a mythical name, a frostbite is heard of no more than a polar bear. Nature works with man, not against him. Cyclones or hurricanes never occur. Instead the Trade-wind, whose

average velocity during the year is but eight miles an hour, is the island's great benefactor. The north-east Trade, laden with ozone, brings fresh vitality and makes of Hawaii a Paradise which claims the world's best climate."

The water is close to 78 degrees the year round. The coral reefs protect the shore from sharks. There is no under-tow, hence surf-bathing is perfectly safe. We were entertained by the surf-riders, who were mostly agile natives with shining bronze bodies. They ride the surf on long pointed boards, shaped like our skis, only double the width.

Honolulu is a charming cosmopolitan city, with an air of distinction. Its public buildings are pleasing, its hotels palatial, its streets and boulevards broad and spotless. The shops are snares to the tourist and abound in exquisite native and Oriental goods. Hawaii was claimed by the U. S. in 1898, after the Spanish-American war. The ex-Queen still lives in Honolulu and is paid a large annuity by the U. S. Government.

There are many natural wonders in these volcanic isles. "Though the world's youngest land, with a short geological history of a few thousand years at most, there are great valleys and high precipices, and living and dead craters, surpassing any others in the world. The largest is 7¼ miles in circumference, with an area of 4½ square miles, from which belches eternal fire or smoke."

Although there are these blasted regions, the fertility of the valleys is phenomenal. Mangoes, pineapples, citrus fruits, vines and every variety of tropical growths flourish luxuriantly.

In season, the shooting for ducks, pheasants and plover is of high class. There are, as well many game-fish in the streams and cascades.

Hawaii is an all-the-year-round golfer's Paradise. Polo and tennis are also much in vogue. "It is never too hot, never too cold. Always just right." Could the mind or heart of man imagine or desire a more perfect spot than these tiny isles in the Pacific? Their beauty is as the brilliance of a seashell. The sky is now an opal, now a topaz. Nature is bursting in richness—the climate is perfect—perfect. Why cannot we, with all the world migrate hither?

Editorial Comment



The Twelve Special Articles on the Feeble-Minded in this issue have been secured and edited by Dr. Helen MacMurchy, Inspector of the Feeble-Minded, Ontario.

**Special
Number.**

to himself and to Ontario, and it may be that in the question of caring for the Mentally Defective he may do as much for Canada as in either Prison Reform or the Care of the Insane.



So far as we have been able to ascertain the Public Health Journal is the first magazine to issue a Special Number on the subject of the Feeble-Minded. It is with a strong sense of the importance of the subject and the value of these articles that we present them to our readers.

The Feeble-Minded.

All the Provinces of Canada are recognizing the necessity of caring for the Feeble-Minded, but in Ontario, under the Provincial Secretary, the Hon. W. J. Hanna, more has been done in this matter than in any other Province. It was in June, 1905, that Mr. Hanna's attention was first directed to the subject, and before the end of the year he was in communication with the Royal Commission on the Care and Control of the Feeble-Minded, appointed in 1904 by King Edward the Seventh, and had also ordered a Special Census to be taken and a Special Government Report to be made on the Feeble-Minded. Eight Reports have since been prepared on the Feeble-Minded in Ontario, and in two recent Acts, the House of Refuge Act and the Industrial Refuge Act, provision is made for the care of the Feeble-Minded. An Inspector of Feeble-Minded for Ontario was appointed in June, 1913.

Mr. Hanna's work in Prison Reform and in establishing progressive methods in caring for the Insane is a lasting honor

It is with no feeling of elation, we can assure you, but rather with a deep sense of humiliation that we begin in this issue a section labeled (?) Ethics (!) In it we propose to show from time to time just how the advertising columns of some of our Canadian Journals appear, contrasted with their teaching on their other pages. Is it that the right hand knows not what the left hand doeth? We do not presume to know the inner workings of the editorial and the business manager mind, but we hope that the pictures which we display from time to time in this section may be so effective that we shall be obliged to discontinue the section because of lack of material to fill it. But, take it from us, that time is not yet here. Are there not enough reputable business firms to advertise without resorting to quacks and their nostrums?

We said once that the greatest evil in this Dominion of Canada is partisanship. We are going to repeat **Partisanship**, that statement here because recent events have shown how very true it is. We have often wondered whether that well-known stanza could have been written from fact,

"Then none was for a party;
Then all were for the state;
Then the great man helped the poor
And the poor man loved the great;
Then lands were fairly portioned,
Then spoils were fairly sold,
The Romans were like brothers
In the brave days of old."

We know nothing of this brotherhood
of man, but rather,
"Now Roman is to Roman
More hateful than a foe;
And the Tribunes beard the high
And the Fathers grind the low;
As we wax hot in faction,
In battle we wax cold,
Wherefore men fight not as they fought
In the brave days of old."

The Canadian Public Health Association has a great mission. It is to teach Canadians that in the field of public welfare and preventive medicine partyism should have no place. Our citizens generally are becoming heartsick of the wielding of the axe and of the inefficiency of partisan appointees. A better day is dawning. We write this with reference to no particular party. Like twins they look very much alike.

Is it generally known that in one of our great Canadian cities there is made no provision whatever to care for **Measles** cases of measles. The other day a case developed in one of the great institutions of this city where numbers of young men are boarding, and the M. O. H. had no harbor of refuge to offer. We don't blame him. The onus is on the Board of Control. Suppose that it should come to pass that 5,000 young men and women in that great city should develop measles at the same time, are they to languish in hall bedrooms and shiver in uncongenial surroundings without nursing and without care? It is common knowledge that the first two or three days of an attack of measles are most distressing, and it is also true that no other contagious disease lowers the resistance of the body to such an extent. In its train may come many other and more seri-

ous maladies. Isn't it about time that every large city in Canada make provision for its measles.

Several communications have come to us anent the article on page 163 of the March issue, entitled "Ad-
A Belated Credit. ministration of Medical Inspection of Schools." Evidently, considerable interest has been engendered. Through an oversight this article was not credited, as it should have been, to Dr. W. E. Struthers, Chief of the Medical Inspection of Schools, Toronto, and we take pleasure now in making this correction.

On opening our morning mail the other day, our eye fell upon the following
An Unsolicited Testimonial. from The Educational Review, St. John, N.B.:

The Magazines.

The Public Health Journal, the official organ of the Canadian Public Health Association, has issued, in the February and March numbers, papers that should be read by every one interested in education or in children. Besides the very full and interesting reports on Medical Inspection of Schools, to which we refer in another column, the March number has an article on Feeble-Minded and Backward Children, an account of the Housewives' League of the United States, and an address on children's health by Dr. Bech, of South Africa, that ought to be read by every mother of school children. This is by no means a complete list of the contents of this most valuable magazine, which we should like to see in every household in Canada. The April number will discuss fully the problems of the feeble-minded. [Toronto, \$2.00 a year, 20 cents a copy.]

Need we say what such words as these mean to us. We are giving our best effort. Evidently we are meeting with your approval. We shall continue to present to you month by month the best journal published in Canada.

Book Reviews

The great consulting room of a wise man is a library.—Dawson

Vacuum Cleaning.

If there is anything more intensely interesting than a vacuum cleaner, its a more complicated vacuum cleaner. There are all kinds nowadays from the simple one which you push across the carpet like a carpet sweeper, and the one on which you expend a large amount of elbow grease pumping on a machine something after the manner of an old-fashioned fire engine, up to the complicated mechanism which you find in our large hotels and apartments, where your sole hardship is to attach a tube to an opening in the wall and watch the dust disappear as though by magic. Well this book tells all about vacuum cleaning and cleaners. It goes into the subject scientifically and says the last word on what proves to be a mighty technical theme. "The contents of this work are compiled from the observations of the author through the seven years during which he has been engaged in the preparation of specifications for and the testing of, complete plants installed in the buildings under the control of the Treasury Department." So speaks the preface. If you want to know about the highways and byways of vacuum cleaners get this book and we can promise you a great many hours of deep and profitable study.

VACUUM CLEANING SYSTEMS—A

treatise on the Principles and Practice of Mechanical Cleaning. By M. S. Cool-ey, M.E., Mechanical Engineer in office of the Supervising Architect, Treasury Department, Washington, D.C.—244 pages, 105 illustrations, 20 tables. Price \$3.00. Published by the Heating and Ventilating Magazine, 1123 Broadway, New York.

Home Care of the Sick.

This is but one among many books put forth to tell the ordinary individual something about sickness and what to do in case such a calamity enters the home. This particular volume is one of the good ones. It compresses within its 250 pages a vast amount of material well treated. Half the volume is concerned with hygiene, both of the home and of the person. It tells how to do things and tells why these things should be done. The home care of the sick occupies almost all the remainder of the book, but twenty pages are given over at the end to a very valuable appendix. Altogether this little book, so tastefully gotten up, is worthy of recommendation, and it will not disappoint anyone who wants to know the truth about elementary hygiene and the home care of the sick.

AMERICAN RED CROSS TEXT BOOK ON ELEMENTARY HYGIENE AND HOME CARE OF THE SICK—By Jane A. Delano, R.N., Chairman of the National Committee, Red Cross Nursing Service—Late Superintendent of the Nurse Corps, U.S.A.; of the Training School for Nurses, Bellevue Hospital, New York; and of the Training School for Nurses, Hospital of the University of Pennsylvania, Philadelphia; and Isabel McIsaac, R.N., member of the National Committee Red Cross Nursing Service; Superintendent of the Nurse Corps, U. S.A.; late Superintendent Illinois Training School for Nurses, Chicago; author of "Primary Nursing Technique," "Hygiene for Nurses," "Bacteriology for Nurses." Prepared for and endorsed by the American Red Cross—P. Blake-ston's, Son & Co., 1012 Walnut St., Philadelphia, 1913—250 pages—Price \$1.00 net.

The Home Nurse.

Here is another of the many books on the care of the sick at home. Everybody gets sick sometimes and somebody finds it too expensive to employ a trained nurse or altogether impossible to go to a hospital. Then somebody in the home, a wife or a mother or a sister has to undertake the task of nursing, for nursing everybody must have when sickness comes. Now there's only one way to learn to nurse and that is by taking advice from someone who knows how. Dr. Lowry here attempts to tell us how to do it and he succeeds in giving us a very interesting and useful volume. It is not as full of elementary hygiene as the book just reviewed above, but then it gives perhaps more minute instruction as to the actual nursing problems confronting us at the bedside. This volume is very much worth while and can be recommended as a purely nursing treatise designed for those in the home who would like to know how a nurse should act. It tells how to nurse various diseases, fevers, pneumonia, contagious diseases, tuberculosis, accidents, and emergencies.

THE HOME NURSE—By E. B. Lowry, M.D., author of "Herself," "Confidences," "Truths," etc. Chicago, Forbes & Company. 225 pages. Price \$1.00.

A Splendid Report.

The 13th Annual Report, 1913; this is what greeted us when we took in our hands this report of the Canadian Association for the Prevention of Tuberculosis. Though there may be something ominous in the association of figures, there is clearly nothing ominous about this report. It reflects the greatest credit upon Dr. George D. Porter, the Secretary, who is responsible for its appearance. And let us say here that this publication is the only medium through which come reports of work done in the interests of tuberculosis patients throughout the Dominion of Canada. During the year the Secretary travels widely giving advice and counsel, besides keeping closely in touch with the work done in various centres. At the annual meetings reports come from local societies and leagues, and from institutions and sanatoria. These with addresses

delivered at the annual meeting are collected and bound. Thus, such a splendid report as now appears. There has been progress all along the line. It is extremely interesting to note the pictures of new buildings erected for the care of the unfortunate sufferers from this disease. It is gratifying to see the advance made in the attitude of physician and layman towards prevention. It is heart-rending to read that such efforts as are being put forth are mitigated by economic conditions, as for example the price of real estate, when houses in our cities are overcrowded, filthy and airless. However, progress is being made, in spite of conditions. Men and women of means are giving liberally, education along this line is advancing rapidly. We would like to see this annual report in the hands of great numbers of our Canadians.

THE CANADIAN ASSOCIATION FOR THE PREVENTION OF TUBERCULOSIS—Thirteenth Annual Report—with transactions of the annual meeting held in Ottawa, Ontario, March 12th and 13th, 1913. Prepared by Dr. George D. Porter, Secretary.

Exercises for Women.

We have no hesitation in saying that this little volume should be in the possession of every woman. We say this because we believe that women are extremely neglectful of the physical and give very little time to exercise. We have heard women say that they get plenty of exercise doing their household work, and that they haven't time to devote to any set form of physical training. That is a great fallacy. Many women cannot find leisure to devote to outdoor sports, or perhaps cannot afford to participate in certain forms of exercise, like horseback riding, but there is no woman who cannot find time or afford to follow the advice in this book. The author has very sanely and very succinctly put the whole matter before her readers. The rules are simple and plainly set forth. The exercises can be followed without difficulty and the reasons given for certain procedures add interest to what might otherwise be dry. We know that there are far too many women with "nerves." We feel certain that if every woman followed such a

regime as here set forth these "nerves," whatever they are, would vanish. We don't care what book you follow, but for health's sake follow some one, and as far as we can see this is as good as any and a great deal better than most.

EXERCISES FOR WOMEN—Containing healthful suggestions on matters directly and indirectly related to exercise and development and an appendix with a

wide range of work, briefly tabulated for the use of teachers—Fully illustrated with over one hundred cuts and half-tones—With illustrated details of mat exercises. By Florence Bolton, A.B., formerly director of Women's Gymnasium, Stanford University. Cloth, 12 mo—Price \$1.00 net. By mail, \$1.10. Funk & Wagnalls Company, New York, Publishers.

Books Received.

The following books have been received, and the courtesy of the publishers in sending them is hereby acknowledged. Reviews will be made of these volumes from time to time.

ANNUAL REPORT OF THE SURGEON-GENERAL OF THE PUBLIC HEALTH SERVICE OF THE UNITED STATES—for the fiscal year, 1913.

CHUMS—A story for boys.

THE DOCTOR'S DAUGHTER—A story for girls.

JOHN'S VACATION—A story for boys.

LIFE PROBLEMS—A story for girls.

By Winfield Scott Hall, M.D., Professor of Physiology Northwestern University Medical School, Chicago. Sex hygiene pamphlets issued by the Council on Health and Public Instruction of the American Medical Association, Chicago American Medical Association Press, 535 North Dearborn Street. 10 cents each.

TEXT BOOK ON ANATOMY AND PHYSIOLOGY FOR NURSES—By Amy E. Pope—author with Anna Caroline Maxwell of "Practical Nursing," and Instructor in the School of Nursing of the Presbyterian Hospital in the City of New York—with 135 illustrations. G. P. Putnam's Sons, New York and London, 1913—Price \$1.75.

BOOKS FOR MEN—By Sylvanus Stall, D.D.

"What a Young Boy Ought to Know."

"What a Young Man Ought to Know."

"What a Young Husband Ought to Know."

"What a Man of 45 Ought to Know."

BOOKS FOR WOMEN—By Mrs. Mary Wood-Allen, M.D., and Mrs. Emma F. A. Drake, M.D.

"What a Young Girl Ought to Know."

"What a Young Woman Ought to Know."

"What a Young Wife Ought to Know."

"What a Woman of 45 Ought to Know."

Published by The Vir Publishing Co., 200-214 N. 15th St., Philadelphia. Toronto, Ont., William Briggs. Uniform in size and binding. Per copy \$1.00.

TRENT WATERSHED SURVEY—A Reconnaissance—By C. D. Howe, Ph.D., and J. H. White, B.A., B.Sc.F., with an introductory discussion by B. E. Fernan, LL.D. Published by The Commission of Conservation, Canada, and printed by The Bryant Press, Toronto.

IMMUNITY—Methods of Diagnosis and Therapy and their practical application—By Dr. Julius Citron, assistant at the University Clinic of Berlin II. Medical Division. Translated from the German and edited by A. L. Garbat, M.D., assistant pathologist and adjunct visiting physician, German Hospital, New York. 2nd Edition, revised and enlarged, 30 illustrations, 2 colored plates, and 8 charts. Philadelphia, P. Blakiston's, Son & Co., 1012 Walnut Street.—Price \$3.50.

Canadian Poets



ARCHIBALD LAMPMAN

[While Lampman has not the extended vision, the range and depth of thought, the well-nigh tumultuous spontaneity, of Isabella Valancy Crawford, few word-artists have painted every phase of Nature with such clear and accurate perception, and with such exquisite fancy and touch. He is a true poet, with a serene and noble spirit, sketching divinely on a high plane of artistry.]

ARCHIBALD LAMPMAN, the beloved poet, was born on Sunday morning, Nov. 17th, 1861, in the village of Morpeth, Ont., where his father, the Rev. Archibald Lampman, was rector of Trinity Church. He was of Dutch descent on both sides of the house.

When the War of Independence was imminent in the American colonies, his paternal grandparents, both loyal to the King, migrated from Pennsylvania and Long Island, to his Majesty's northern dominions, the one — Lampman, locating on a grant of land in the Niagara Peninsula, and the other Col. John H. Gesner, locating in Nova Scotia. "Mountain Point," the old homestead of the Lampmans, near Niagara, Ont., is still in possession of the family.

Lampman dedicated his third volume of verse, "Aleyone," as follows: "To the memory of my father, himself a poet, who first instructed me in the art of verse";

and we are told by his biographer that there had been poets and scientists on his mother's side of the house.

When Archibald has entered his sixth year, the family left Morpeth, resided for a time at Perrytown, near Port Hope, and in October, 1867, moved to Gore's Landing, a small community on the shore of Rice Lake. Here, in the midst of beautiful scenery, they dwelt for seven years, the most impressionable years of the poet's life.

Unfortunately, in November, 1868, Archibald was stricken with rheumatic fever, induced by a damp rectory. He suffered acutely for months, and in consequence was lame for four years. It was probably due to this illness that in youth and in manhood he never enjoyed robust health.

The future poet was educated at home until nearly nine years of age, when he entered the school of a notable schoolmaster, Mr. F. W. Barron, M.A., of Cambridge,

formerly Principal of Upper Canada College. Here he was thoroughly grounded in Latin and Greek and taught to write beautifully. When thirteen years old, he attended the Cobourg Collegiate Institute for a year, and then went to Trinity College School, Port Hope, to prepare for attendance at Trinity College, Toronto. During his two years in Port Hope, he applied himself intensely and won many prizes. In September, 1879, he entered Trinity College, Toronto, where, by the help of scholarships won, he completed his course, graduating with honors in classics in 1882. After graduation, he taught for a few months in the Orangeville High School, where he proved to be a weak disciplinarian, and then accepted permanent employment in the Post Office Department at Ottawa.

In 1887, Lampman married Maud, the youngest daughter of Dr. Edward Playter, of Toronto, and during their twelve years of marital happiness, several children were born to them.

In 1888, our poet published his first book of verse, "Among the Millet," which ex-

tended his fame and encouraged him to greater effort. Five years later, Messrs. Copeland & Day, of Boston, issued his second volume, "Lyrics of Earth," which won for him additional laurels. His third volume, "Alecione," was on the press of Messrs. Constable & Company, of Edinburgh, when he was stricken by a sharp pain in the lungs, and died two days later, on the 10th of February, 1899.

Archibald Lampman was slight of form and of middle height. He was quiet and undemonstrative in manner, but had a fascinating personality. Sincerity and high ideals characterized his life and work; and when he passed from our midst, at thirty-seven years of age, he left a monument behind him of noble verse, which will endure as long as Canadian literature is a living reality.

In 1900, the three books from his pen, with additional poems, and with an excellent memoir from the pen of Duncan Campbell Scott, were published in one large volume of nearly 500 pages, by Messrs. George N. Morang & Company, Limited, of Toronto.



APRIL IN THE HILLS.

To-day the world is wide and fair
With sunny fields of lucid air,
And waters dancing everywhere;

The snow is almost gone;
The noon is builded high with light,
And over heaven's liquid height,
In steady fleets serene and white,
The happy clouds go on.

The channels run, the bare earth steams,
And every hollow rings and gleams
With jetting falls and dashing streams;

The rivers burst and fill;
The fields are full of little lakes,
And when the romping wind awakes
The water ruffles blue and shakes,
And the pines roar on the hill.

The crows go by, a noisy throng;
About the meadows all day long,
The shore-lark drops his brittle song;

And up the leafless tree
The nut-hatch runs, and nods, and elings;
The bluebird dips with flashing wings,
The robin flutes, the sparrow sings,
And the swallows float and flee.

I break the spirit's cloudy bands,
A wanderer in enchanted lands,
I feel the sun upon my hands;
And far from care and strife
The broad earth bids me forth. I rise
With lifted brow and upward eyes.
I bathe my spirit in blue skies,
And taste the springs of life.

I feel the tumult of new birth;
I waken with the waking earth;
I match the bluebird in her mirth;
And wild with wind and sun,
A treasurer of immortal days,
I roam the glorious world with praise,
The hillsides and the woodland ways,
Till earth and I are one.

THE FROGS.

I.

Breathers of wisdom won without a quest,
Quaint uncouth dreamers, voices high
and strange;
Flutists of lands where beauty hath
no change,
And wintry grief is a forgotten guest,
Sweet murmurers of everlasting rest,

For whom glad days have ever yet to
run,

And moments are as æons, and the sun
But ever sunken half-way toward the west.

Often to me who heard you in your day,
With close rapt ears, it could not choose
but seem

That earth, our mother, searching in what
way

Men's hearts might know her spirit's in-
most dream;

Ever at rest beneath life's change and stir,
Made you her soul, and bade you pipe for
her.

II.

In those mute days, when spring was in
her glee,

And hope was strong, we knew not why
or how,

And earth, the mother, dreamed with
brooding brow,

Musing on life, and what the hours
might be,

When love should ripen to maternity,
Then like high flutes in silvery inter-
change

Ye piped with voices still and sweet and
strange,

And ever as ye piped, on every tree

The great buds swelled; among the pen-
sive woods

The spirits of first flowers awoke and
flung

From buried faces the close-fitting hoods,
And listened to your piping till they fell,

The frail spring-beauty with her per-
fumed bell,

The wind-flower, and the spotted adder-
tongue.

III.

All the day long, wherever pools might be
Among the golden meadows, where the
air

Stood in a dream, as it were moored
there

For ever in a noon-tide reverie,
Or where the birds made riot of their glee

In the still woods and the hot sun shone
down,

Crossed with warm lucent shadows on
the brown

Leaf-paven pools, that bubbled dreamily,

Or far away in whispering river meads

And watery marshes where the brood-
ing noon,

Full with the wonder of its own sweet
boon,

Nestled and slept among the noiseless
reeds,

Ye sat and murmured, motionless as
they,

With eyes that dreamed beyond the
night and day.

IV.

And when day passed and over heaven's
height,

Thin with the many stars and cool with
dew,

The fingers of the deep hours slowly drew
The wonder of the ever-healing night,
No grief or loneliness or rapt delight.

Or weight of silence every brought to
you

Slumber or rest; only your voices grew
More high and solemn; slowly with hush-
ed flight

Ye saw the echoing hours go by, long-
drawn,

Nor ever stirred, watching with fathom-
less eyes,

And with your countless clear anti-
phonies

Filling the earth, and heaven, even till
dawn,

Last-risen, found you with its first pale
gleam,

Still with soft throats unaltered in your
dream.

V.

And slowly as we heard you, day by day,
The stillness of enchanted reveries

Bound brain and spirit and half-closed
eyes,

In some divine sweet wonder-dream astray;
To us no sorrow or upreared dismay

Nor any discord came, but evermore

The voices of mankind, the outer roar,
Grew strange and murmurous, faint and
far away.

Morning and noon and midnight, exqui-
sitely,

Rapt with your voices, this alone we
knew,

Cities might change and fall, and men
might die,

Secure were we, content to dream with you
That change and pain are shadows faint
and fleet,

And dreams are real, and life is only
sweet.

HEAT.

From plains that reel to southward, dim,
 The road runs by me white and bare;
 Up the steep hill it seems to swim
 Beyond, and melt into the glare.
 Upward half-way, or it may be
 Nearer the summit, slowly steals
 A hay-cart, moving dustily
 With idly clacking wheels.

By his cart's side the wagoner
 Is slouching slowly at his ease,
 Half-hidden in the windless blur
 Of white dust puffing to his knees.
 This wagon on the height above,
 From sky to sky on either hand,
 Is the sole thing that seems to move
 In all the heat-held land.

Beyond me in the fields the sun
 Soaks in the grass and hath his will;
 I count the marguerites one by one;
 Even the buttercups are still.
 On the brook yonder not a breath
 Disturbs the spider or the midge.
 The water-bugs draw close beneath
 The cool gloom of the bridge.

Where the far elm-tree shadows flood
 Dark patches in the burning grass,
 The cows, each with her peaceful eud,
 Lie waiting for the heat to pass.
 From somewhere on the slope near by
 Into the pale depth of the noon
 A wandering thrush slides leisurely
 His thin revolving tune.

In intervals of dreams I hear
 The cricket from the drougthy ground;
 The grasshoppers spin into mine ear
 A small innumerable sound.
 I lift mine eyes sometimes to gaze:
 The burning sky-line blinds my sight:
 The woods far off are blue with haze:
 The hills are drenched in light.

And yet to me not this or that
 Is always sharp or always sweet;
 In the sloped shadow of my hat
 I lean at rest, and drain the heat;
 Nay more, I think some blessed power
 Hath brought me wandering idly here:
 In the full furnace of this hour
 My thoughts grow keen and clear.

AMONG THE MILLET.

The dew is gleaming in the grass,
 The morning hours are seven,
 And I am fain to watch you pass,
 Ye soft white clouds of heaven.
 Ye stray and gather, part and fold;
 The wind alone can tame you;
 I think of what in time of old
 The poets loved to name you.

They called you sheep, the sky your
 sward,
 A field without a reaper;
 They called the shining sun your lord,
 The shepherd wind your keeper.

Your sweetest poets I will deem
 The men of old for moulding
 In simple beauty such a dream,
 And I could lie beholding,

Where daisies in the meadow toss,
 The wind from morn till even,
 For ever shepherd you across
 The shining field of heaven.

THE CLEARER SELF.

Before me grew the human soul,
 And after I am dead and gone,
 Through grades of effort and control
 The marvellous work shall still go on.

Each mortal in his little span
 Hath only lived, if he have shown
 What greatness there can be in man
 Above the measured and the known;

How through the ancient layers of night,
 In gradual victory secure,
 Grows ever with increasing light,
 The Energy serene and pure:

The Soul that from a monstrous past,
 From age to age, from hour to hour,
 Feels upward to some height at last
 Of unimagined grace and power.

Though yet the sacred fire be dull,
 In folds of thwarting matter furled,
 Ere death be nigh, while life is full,
 O Master Spirit of the world,

Grant me to know, to seek, to find,
 In some small measure though it be,
 Emerging from the waste and blind,
 The clearer self, the grander me!

Correspondence Corner

MEDICAL INSPECTION.

Vancouver, B.C., Mar. 30, 1914.

The Editor,

The Public Health Journal:—

Sir,—The Public Health Journal deserves a great deal of credit for the valuable collection of statistics they have gathered in reference to the Medical Inspection of Schools and which they have published in the February and March numbers of the Journal. The articles I have read with a great deal of interest and with great benefit.

In connection with your article on Medical Inspection in British Columbia with special reference to the City of Vancouver, I would like to say that we have always aimed to make our system of medical inspection as perfect as possible though no doubt there are many things to be desired which we have not yet obtained.

It was said that in the city there is no regular instruction in personal hygiene, use of the toothbrush or care of the teeth, given. I may say that regular instruction has been given in these subjects for the last two years both in class and in person.

Our nurses here average nearly four hundred visits a month to the homes; this part of the work we regard as being of the utmost importance.

In connection with the gathering of statistics it seems to me that it would be of great value if the same system of recording the defects was used throughout the Dominion; where every Medical Inspector has his own system, it is almost impossible to gather statistics which have any real value.

I trust that the Canadian Public Health Association may be able to do something in this respect in the near future.

A school dentist was appointed on salary to look after the teeth of poor children

in this city last January. The Board equipped an office most thoroughly so that the dentist would have every advantage and every appliance in carrying out his work. The dental room measures about 15x20 feet, it has a white tiled floor and walls, and white enamelled fixtures. It certainly looks sanitary in every respect.

If at any time you would care to publish statistics of the work done in our city, I would be pleased to let you have them.

Yours truly,

F. W. BRYDONE-JACK,
School Medical Officer.

Illegitimacy and Heredity.

The Editor,

The Public Health Journal:—

Sir,—A number of children of illegitimate birth have been provided during the past year with remarkably good foster homes and as they have been taken within the first year of their birth they may safely be classed as permanently provided for. This is a most pleasurable feature of child-saving work and those who have been the means of bringing together the longing mother-heart and the nameless little waif and have watched the steady growth of the love cords binding the two hearts into one will agree that such a service brings with it an abundant award. Such children when once established in their new homes require but little visitation for having been sought for purely benevolent and unselfish purposes, they are not at all likely to be treated with anything but the greatest kindness and consideration.

There is sometimes much hesitation on the part of good people in accepting a child born out of wedlock. In many of the applications the main stipulation is that the child must be of legitimate birth, owing to the somewhat natural fear that the child may later on develop, in spite of

good training, a laxity of morals and become a disgrace instead of a comfort in advancing years. Hereditary traits are not, however, necessarily transmitted in cases of this kind. If a child is physically well-born, of parents in good health and not habitually vicious or intemperate, he may be free from many serious disability. It is where the mother is a weak and immature girl of evil training and perhaps herself the child of a vicious woman, that the greatest danger of hereditary weakness is to be feared. Samples of the latter class have presented themselves and will undoubtedly be found in all child-rescue work, but the great majority of the children do not belong to the hereditarily diseased or tainted class. Heredity is not a matter of one generation only, a child wrongly born may possess in even greater measure than the weakness of the parents

the virtues of the grandparents. We have not as yet in this young country the hopelessly vicious and pauper element of the old world, where generation after generation has handed down an increasingly depraved human strain with none of the redeeming qualities of virtue and sobriety present to counteract the utterly bad instincts and ambitions. That we may never have such an element to curse the progress of the new world wise and progressive laws have been adopted, particularly along the line of child-saving and child-protection, and many child-welfare organizations are nobly working to create a high moral sentiment which is after all the best safeguard.

Yours, etc.

J. J. KELSO,
Superintendent of Neglected and Dependent Children of Ontario.

THE IRASCIBLE MIND.

Impatience.

Diagnosis—

A little impatience often subverts great undertakings.—Chinese.

Remedy—

Bear in mind—It is not possible to secure distant or permanent happiness but by the forbearance of some immediate gratification.—Dr. Johnson.



Matters Military

Canadian Army Medical Corps



WINTER CAMPAIGNING IN CANADA FROM A CLIMATIC VIEWPOINT

By MAJOR LORNE DRUM, M.D., D.P.H.

Permanent Army Medical Corps, Militia Headquarters, Ottawa.

Read at the 7th Annual Meeting of The Association of Medical Officers of the Canadian Militia, 25th February, 1914.

FROM this point of view the two primary factors to be considered in this country are cold and snow. Both are important, but possibly the latter is even more so. The natural highways of Canada during the open season are her waterways, the rivers and lakes of the country. When winter arrives and these are frozen over and deeply covered with drifting snow they are closed to all except the snowshoer and his light toboggan. For the transport of heavy material such as would accompany an army there would be no ready passage. In these days of railways and parlour cars we are apt to forget how soon the exigencies of a war might disorganize and render useless these artificial highways, and throw us back once more on the natural traffic channels of the country as our only available means of communication and transport. A knowledge of these channels and of the use made of them by former generations in the carrying on of war is a matter of moment to the Canadian soldier of to-day. It is true that our country has progressed since the days when Benedict Arnold lead his famished troops down the Chaudiere, or since Bradstreet paddled up the Mohawk to capture Frontenac. The Canadians called this species of warfare "La Petite Guerre" to distinguish it from "La Guerre" of armies. The winter was the favourite season for "La Petite Guerre." Expert in the use of the snowshoe and fearless of cold, the Canadians would wind their way through the silent forests, looking, with their capuchins over their heads, like a procession of friars. Behind them on the light toboggan they dragged their blankets and provisions. At night they used their snowshoes to shovel a wide circular pit in the snow. Building their camp fire in the centre, they would sleep around it on piles of spruce boughs, secure from the winter wind.

Such bands as these would cover immense distances and our annals are full of their deeds. But it was not war, at least not the war of armies; and if we are to understand by the word "campaigning" hostilities on this larger scale, it is doubtful whether we have ever had a winter campaign in Canada, unless we should so recognize Montgomery's expedition, and the subsequent blockade of Quebec. Rigaud's expedition against Fort William Henry marching 1,400 strong in the dead of winter

through the snow, was but a raid after all. It was only "La Petite Guerre" swollen to larger proportions. The same may be said of Drummond's winter campaign, when in two dashes across the frozen Niagara in the bitter cold of late December he raided the American frontier from Fort Niagara to Buffalo.

The campaigning of armies stopped with approaching winter. Bradley in his "Fight With the French for North America" says: "On the approach of winter it was the custom of the colonial forces after leaving slender garrisons of permanent troops in a few isolate snow-bound outposts, to disband and to disperse, each man to his own home. Each spring the colonies had to form practically a new army."

With raw levies such as these, loosely organized and ill-equipped to resist even the chill winds of autumn, the necessity for this custom is obvious. On the other hand though the army disappeared Rogers and his hardy rangers spent the winter months in raiding Canada. Like their French opponents in "La Petite Guerre," they were well equipped to resist the cold, and could travel swiftly over the snow-covered land, bringing ample provisions with them.

To quote from Bradley again:—

"It is hardly necessary to remark that campaigning on any serious scale was out of the question in the northern colonies till the woods and the lakes had been loosened from their winter burden by the warm winds of April. Even armies in Europe went into winter quarters and suspended operations by a sort of unwritten agreement."

Yes, they did; but would armies in Europe to-day go into winter quarters and suspend operations? The operations in Manchuria were not suspended during the winter, and yet the climate of Manchuria is severer than that of Western Europe. So severe in fact that one is inclined at first sight to compare it with that of Eastern Canada, until one comes to the question of snow. The accompanying tables showing the average monthly winter temperatures experienced by the Japanese army in the vicinity of Mukden, compared with the temperatures for the same months observed at Montreal, show a fair conformity, with the balance, if any, pointing to somewhat colder conditions at Montreal. But when one looks at the snow record the conditions are widely different. In the six months from November to April, Montreal had 60 days in which snow fell, Mukden but 16. The total snow fall at Montreal during these months amounted to 130 inches, deeply covering the ground. At Mukden the snow fall was so slight that it had no deterrent effect upon wheeled transport. In direct contrast to the Canadian season, the winter conditions of Manchuria with the bare frozen ground, converting marshes, fields, rivers and streams into one continuous hard surface added greatly to transport facilities. But the climatic factor of cold—of bitter winter cold—is as potent there as it is in Canada.

COMPARATIVE WEATHER CONDITIONS IN MANCHURIA AND CANADA

The Manchurian observations were made near Mukden. The Canadian ones (extracted from the Annual Reports of the Canadian Meteorological Services), were made at McGill Observatory, Montreal.

Month	Temperature in the Shade								Number of days of Snow		Snowfall Inches
	Average Temperature		Mean of Minima		Mean of Maxima		Lowest Minimum		Near Mukden	Montreal	
	Near Mukden	Montreal	Near Mukden	Montreal	Near Mukden	Montreal	Near Mukden	Montreal			
November	32.7	29.7	22.7	24.4	42.8	35.0	9	7	3	9	10.5
December	16.6	9.2	6.8	2.9	26.4	15.6	— 7	1-14	2	17	30.6
January	23.4	8.9	12.1	1.4	34.8	16.3	— 10	— 11.3	3	15	45.
February	14.	10.3	1.0	2.3	27.0	18.2	— 14	— 9.2	2	13	38.9
March	34.2	25.0	22.	17.8	46.0	32.1	— 0	— 1	3	3	2.7
April	46.	41.9	36.7	33.9	55.3	49.9	26	21	3	3	2.5

Weather conditions during the battle of Mukden, March 1st-10th, 1905, compared with the conditions recorded at the McGill Observatory, Montreal, on the same days, and abstracted from the Annual Reports of the Canadian Meteorological Services.

Date	Temperature in the shade				Snow	
	Minimum		Maximum		Near Mukden	Montreal
	Near Mukden	Montreal	Near Mukden	Montreal		
Feb.—						
26..	20	9.6	25	28.0	Snow	Snow
27..	0	5.7	25	20.2		
28..	1	16.4	25	26.6		Snow
March—						
1..	0	5.0	25	15.9		
2..	18	7.5	45	17.6	Snow	
3..	10	13.1	32	28.8		
4..	8	10.9	32	16.4		Snow
5..	8	2.1	28	16.6		Snow
6..	7	8.4	38	15.7		
7..	11	4.0	42			
8..	13	18.6	43	30.9		Snow
9..	14	18.7	53	23.4		
10..	20	16.2	52	30.6		
11..	20	8.1	50	20.0		
12..	21	4.6	49	18.8		
13..	37	0.3	47	10.8		

Weather conditions during the battle of Hei-Kou-tai, 25th-29th January, 1905, compared with the conditions recorded at the McGill Observatory, Montreal, on the same days, and abstracted from the Annual Reports of the Canadian Meteorological Services.

Date	Temperature in the shade				Snow	
	Minimum		Maximum		Near Mukden	Montreal
	Near Mukden	Montreal	Near Mukden	Montreal		
Jan.—						
21..	20	0.7	40	3		Snow
22..	28	7.3	46	14.2		Snow
23..	18	0.	40	7		
24..	0	9.2	18	1.7		Snow
25..	0	2.6	18	5.1		
26..	-1	6.6	18	2.4	Snow	
27..	-4	0.4	16	18.2	Snow	Snow
28..	-2	10.6	18	20.7	Snow	Snow
29..	-6	-1.0	14	14.0		
30..	-10	0.3	16	11.9		
31..	-6	6.2	24	5.0		

How did the Japanese soldier meet it?

Macpherson states: "After the battle of Sha-Ho in October, 1904, the second Japanese army remained entrenched in a position extending some ten miles along the Sha river, with the troops of the second line cantoned in the villages in the rear.

"This was the position until the battle of Hei-kou-tai, which started on the 25th January and lasted till the 29th.

"On the 24th, the day before the conflict started the weather changed suddenly falling to a low point and the relative humidity increased, with the wind from the north. On the 26th snow began to fall, and the weather was at its worst on the 27th, 28th and 29th, the closing days of the battle. The air was then saturated with moisture, and the high relative humidity caused it to become a good conductor of heat from the body. To this fact more than to the actual lowness of the temperature, is to be attributed the effects of the cold."

The attached tables show the lowest and highest temperatures recorded during the days on which the battle was waging, compared with similar temperatures on the same days at Montreal.

The 5th Japanese Division advanced into the fight on the 27th, the third day of the battle. The Times historian writes:

"It may be doubted whether men ever marched into battle in such a snowstorm. Accompanied by a Manchurian gale it lasted without intermission until the 28th. The mercury went down to 4 F. below zero. The ground was hard as rock. When the troops arrived within rifle range of the enemy, they found themselves on open ground affording no shelter whatever, exposed to a hail of lead from quickfiring, machine guns and rifles which the Russians directed upon them from behind Chinese houses. Darkness came on before anything definite had been accomplished, and the Japanese had to face the ordeal of passing the night in battle order without shelter of any kind, and without a spark of fire. The snow fell thickly on the already covered ground, while an icy gale blew continuously. To sleep in such conditions would have been to die. The night had to be passed with the men stamping their feet, beating their hands together, and watching to prevent anyone lying down."

Another writer says: "Great efforts were made to supply warm food from the rear, but the distribution was very difficult and consequently the men in advanced positions were obliged to eat biscuits and snow for 48 hours. It was only on the

third day that charcoal reached parts of the fighting line."

And yet no cases of death or of apparent death from exposure to cold occurred. There were several cases of frost-bite, but even these were mostly mild, and of only the first or second degree. This good result was attributed largely to the excellence of the clothing, which rendered the men practically immune to the effects of cold.

McPherson states: "The troops marched and fought heavily clothed. For example the men who were brought in wounded to the dressing stations were noted to have on the following clothes:— 'Cotton socks, drawers and vest, such as are worn in summer, with thick woolen socks, drawers and jersey over them; the thick dark cloth winter uniform trousers and tunic, with the summer khaki drill trousers and jacket over them, and the special winter goatskin waistcoat and winter greatcoat over all. A full pack was carried with straw and Chinese felt shoes attached to the valise. A blanket and blue uniform greatcoat were also attached to the pack. Knitted gloves and felt mitts covered the hands. A Balaclava cap covered the head with, in addition, sheep or goatskin ear covers; the whole being covered by the blanket hood of the winter greatcoat."

To quote again from MacPherson: "The food is good, plentiful and varied. Men in contact with the enemy and on outpost are allowed more food than those in the rear. After the experience gained at Hei-kou-tai, each soldier was given an issue of sugar which he carried in his pocket and which he was told to eat as he lay in the positions. This not only kept him awake but increased the bodily warmth by combustion."

In a word, by the ample provision of suitable clothing and food, to well disciplined troops carefully trained beforehand in the proper precautions necessary to avoid frost bite and even death, the Japanese were able to endure almost with immunity the hardships of a winter campaign involving long nights and days of unsheltered exposure to severe cold such as occurred during the battles of Hei-Kou-tai and Mukden.

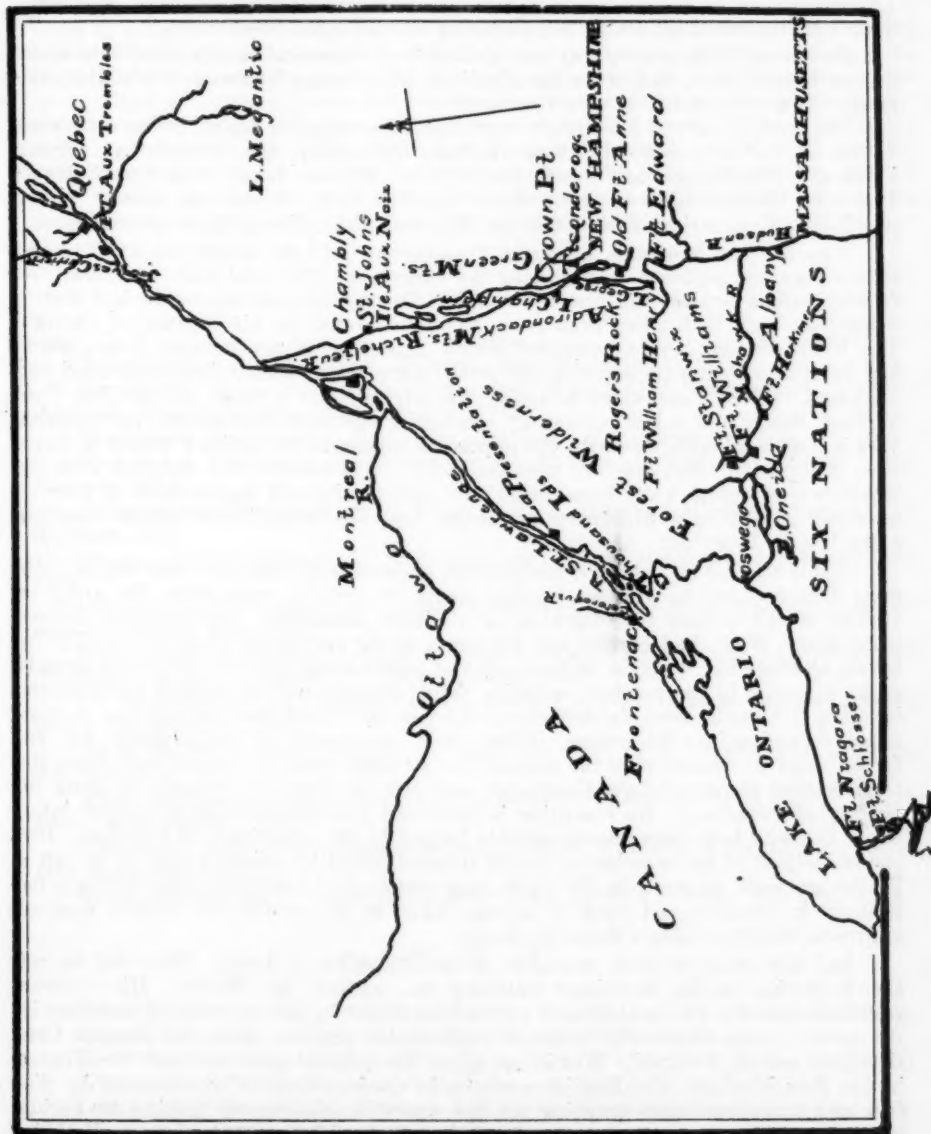
It is interesting now to turn from the modern Japanese soldier well accutred for winter, to see what has been done in Canada along similar lines. The mind goes back to Rigaud's brief expedition of healthy, carefully selected men; an expedition which costly and unnecessary as it may have been, was certainly prepared to meet the rigours of our winter.

Kingsford writes: "Unusual care was bestowed on the organization of the column. It consisted of 1,400 men, composed of 50 grenadiers, 200 volunteers from the regular troops, 250 colonial troops, 600 Canadians and 300 Indians. No pains were spared in equipping them; overcoats with pleated hoods to pull over their heads, blankets, bearskins to sleep in, tarpaulins to sleep under, spare moccasins, spare mittens, kettles, axes, needles, awls, flint and steel and many miscellaneous articles were provided, to be dragged by the men on light Indian sledges, or toboggans, along with provisions for twelve days. This force left Montreal in February and marched up the frozen snow-covered Richelieu river and the lakes for 150 miles to Fort William Henry with a week's rest at Ticonderoga en route. After a week of unavailing assaults on the English fort the expedition withdrew into Canada."

The season was one of such severity as to cause mention to be made of the intense cold, in letters of the period. And yet although casualties from the fighting are recorded, and cases of snow-blindness on the return march are carefully noted, yet no mention is made of any casualties from the cold. The men were properly protected by good clothing, suitable food, and a knowledge of the personal precautions to be taken in cold weather.

Let me now turn to a different picture, the American invaders blockading Quebec in the winter of 1775-76. Enfeebled by disease, ill-clad and ill-fed surely no soldiers were ever so poorly equipped to face the blizzards of the lower St. Lawrence. And yet in spite of the hardships they endured from the cold and snow,—and they must have been many,—they maintained a blockade of the city, until the opening of navi-

gation brought to the beleaguered garrison the anxiously awaited reinforcements. The invaders retreated, the blockade was over. But how close had this sick and half-starved army been to success. Another turn of Fortune's wheel, another weight in the balance of fate, and Quebec had fallen. And with its fall the conquest of Canada would have been an accomplished fact, achieved by an army,—so-called for want of a better name,—but an army led by two far-seeing and determined leaders—Montgomery and Arnold—who rose superior to discouragement, till death and jealousy removed them in turn from the scene.



Arnold's expedition until it joined forces with Montgomery's was a raid pure and simple,—another instance of "La Petite Guerre" on a larger scale. But Montgomery's invasion was a different thing. He led his army into an enemy's country, carrying on military operations and continuing to advance in obedience to the developing situation, at a season of the year when by all precedent he should have been safely back in his own country, with his men dispersed to their homes. He did what had never been attempted before, he conducted a winter campaign in Canada; and as a result he all but conquered the country.

What would have been the result had his army been trained, equipped and disciplined on the standard set by the Japanese troops on the Sha-Ho?

But surely Montgomery was not the first or only general in this country to whom an opportunity came, to deal a staggering blow to an enemy by means of a winter campaign. If so, why did these others not act?

The closing years of the French wars found the opposing forces facing each other astride the northern route to Canada via Lake Champlain, the French at Crown Point and Ticonderoga, and the English at Fort William Henry and Fort Edward. It was the obvious object of each to drive the other back, the one on Albany with a possibility of capturing it, the other on Montreal with a like prospect of success.

Why did not Montcalm retain at Ticonderoga until the winter the 6,000 troops, mostly regulars, gathered there during the summer of 1756, and lead them down the frozen Hudson against the English colonies? During the past summer he had dealt a staggering blow to English prestige in the New World by his capture of Oswego. The 10,000 English troops, composed almost altogether of raw colonial levies, which had faced him during the summer, had on the approach of winter, been disbanded and dispersed. There was nothing to oppose his advance but a small garrison at Fort William Henry and a few permanent companies scattered throughout the colonies. Was it not the French moment—the opportune moment—for action? Would a European general of to-day, endowed with the ability of Montcalm, but fortified with the experience of recent wars, have seized this opportunity,—if opportunity it were,—or would he also have withdrawn his troops into the inactivity of winter quarters along the St. Lawrence.

Again why did not Amherst continue his advance into Canada in the fall of 1759, even if he had had to wait for another month or two in preparing his army of regular troops to meet the exigencies of a winter campaign unexpectedly thrown upon him. Wolfe had carried out his share of the operations planned for 1759 by taking Quebec; but Amherst with an army of 10,000 troops, most of whom had already spent a winter in the northern colonies, failed to carry out his allotted portion—the invasion of Canada down the Richelieu,—because he would not contemplate a campaign extending into the winter. When after two months of unfortunate, but enforced delay at Ticonderoga the moment for advance came, he turned back from the October sleet storms of Lake Champlain and left the fate of Canada to hang on Murray and Quebec. No exception is taken to his action; the difficulties that influenced him may have been insurmountable judged by the experience of his time. But one is inclined to ask whether a British General would be upheld to-day if he left a British garrison hemmed in for eight long months in a hostile country, facing a foe superior in numbers and equal in morale, while he sat astride the nearest road of approach without raising a finger in its aid.

And this brings us back once more to the Chevalier de Levis. Why did he not assault Quebec during the winter following its capture by Wolfe? His veteran regulars, enured to the hardships of a Canadian winter by several years of residence in the country, were allowed to lie idle in their winter quarters along the Jacques Cartier river and at Montreal. Was it not again the psychological moment for France in the New World? The English garrison in Quebec, dreadfully weakened by disease and privations were dragging out the weary months eagerly looking for spring and help. Did opportunity knock unheeded at de Levis' door that winter? Had the

English fleet on its arrival in the harbour in May of 1760 found the lilies of France once more floating over the ramparts of Quebec, who can say what the final outcome might have been.

Can this avoidance of winter campaigning so customary in the past be ascribed entirely to the deterring physical influence of cold and snow, or may we look for the real underlying cause in the diseases that rendered their armies incapable of remaining efficient military machines when called upon to expend the extra energy required to face the climatic inclemencies of winter. For instance let us take the case of Montgomery's army. Once the long winter had settled in at Quebec, did it not become so enfeebled that except for the purpose of maintaining a blockade, its usefulness as a military machine capable of moving and operating on the offensive was at an end? Enfeebled, however, not by the icy winds and snowdrifts of a bitter winter, but by smallpox and other diseases that raged without let or hindrance through the terror-stricken ranks. Scientific preventive medicine was as yet unborn. What a difference do we see to-day. The powerful shield of modern hygiene is at our service, and the army that buckles it on,—as did the army on the Sha-Ho,—protects its soldiers from disease, and enables them to face climatic conditions which would have driven the disease-weakened armies of other days from the field.



NOTES.

To be Major—David Donald, Esquire. 21st November, 1913.

Captain M. W. A. McNaughton is transferred to the 21st "Westmount" Battery, Canadian Field Artillery. 2nd January, 1914.

Provisional Lieutenant J. H. Tandy is retired. 5th February, 1914.

Provisional Lieutenant (supernumerary)—E. Bice is permitted to retire. 30th January, 1914.

To be Nursing Sisters (supernumerary)—Veda Dier and Gladys Creeggan. 1st January, 1914.

To be Captain—Lieutenant (supernumerary) R. R. McClenahan. 15th January, 1914.

To be provisional Lieutenant (supernumerary)—Joseph Emile Daignault, gentleman. 17th December, 1913.

Provisional Lieutenant J. O. O. Ledoux is transferred to the 54th Regiment "Carabiniers de Sherbrooke." 21st January, 1914.

To be provisional Lieutenant (supernumerary)—John Douglas McQueen, gentleman. 2nd January, 1914.

To be Captains—Lieutenant G. H. Tutill, 7th June, 1913; Lieutenant J. J. Thomson, 2nd July, 1913.

To be provisional Lieutenant (supernumerary)—Edward Bishop Alport, gentleman. 21st August, 1913.

Provisional Lieutenant (supernumerary)—A. I. Willinsky is permitted to retire. 12th February, 1914.

To be Nursing Sister (supernumerary)—Helen Lauder Fowlds. 6th Feb., 1914.



Leave of absence, with permission to travel abroad, has been granted as follows: Major D. Donald, A.M.C., five months from the 20th February.

Lieutenant-Colonel J. A. Grant, P.A.M.C., from the 21st March to the 21st April.

Nursing Sister M. M. Goodeve, A.M.C., for one year from the 9th March.

Lieutenant-Colonel W. H. Delaney, A.M.C., from the 26th March to the 1st July, 1914.

ARMY MEDICAL CORPS

The following certificate is granted—Lieutenant E. B. Alport, A.M.C., Captain.



POSTINGS.

The following officers are posted for duty as stated:—

Major R. Law reverts to the Regimental List from No. II Field Ambulance.

Major T. H. Leggett and J. C. Caskey are detailed for duty to No. II Field Ambulance.

Major D. Donald is detailed for duty as Medical Officer to the 50th Regiment "Highlanders," 21st November, 1913.

Lieutenant (supernumerary) M. A. Carmichael is detailed for duty to No. XXI Cavalry Field Ambulance, 18th December, 1912.

Lieutenant (supernumerary) F. Munroe is detailed for duty as supernumerary Medical Officer to the 59th Stormont and Glengarry Regiment.

Provisional Lieutenant -supernumerary Medical Officer to the 3rd "The Prince of Wales Canadian Dragoons."

Provisional Lieutenant (supernumerary) J. R. McLean is detailed for duty as Medical Officer to the 51st Regiment "The Soo Rifles."

Provisional Lieutenant (supernumerary) J. E. Daignault is detailed for duty as Medical Officer to the 54th Regiment "Carabiniers de Sherbrooke."

Captain H. Morrell reverts to the Regimental List from No. XVI Cavalry Field Ambulance.

Provisional Lieutenant (supernumerary) A. D. McArthur is detailed for duty as supernumerary Medical Officer to the 46th Durham Regiment, 20th May, 1913.



PROMOTION EXAMINATION—RESULTS.

The undermentioned officers have passed the promotion examination, held in December, 1913, in the subjects stated against their names:—

For rank of Major—Captain J. O. D. Lacroix, P.A.M.C., Subhead (d) (iii).; Captain H. A. Chisholm, P.A.M.C., Subhead (d) (iii).



REGIMENTAL MEDICAL SERVICES.

2nd Dragoons—To be Major—Captain F. W. E. Wilson. 22nd June, 1912.

48th Regiment "Highlanders"—To be Major—Captain A. J. Mackenzie. 22nd June, 1912.



RESERVE OF OFFICERS.

The following officers are placed on the Retired List under the provisions of K. R. & O., (Canadian Militia), 1910, para. 231:—

Major J. M. Elder, late 2nd Regiment, C.G.A.

Captain E. A. Kirkpatrick, late 66th Regiment, 10th February, 1914.



Appendix VI, Section 21, King's Regulations and Orders for the Canadian Militia, is hereby cancelled and the following substituted:—

- Lieutenant-Colonel's Certificate.
- (a) Organization and Administration.
 - (b) Sanitation.
 - (c) Laws and Customs of War, especially as regards the Convention of Geneva (written examinations).
 - (a) Organization and Administration.
- The medical organization and administration of a division on active service in Canada, and the problems connected therewith.
- R. A. M. C. Training.

- Regulations, Canadian Medical Service.
- Manual of Equipment, Canadian Medical Service.
- Field Service Regulations, Parts I. and II.
- War Establishments, Canadian Militia.
- Canadian Militia—Mobilization Regulations.
- Standard works on the strategical and tactical employment of the Medical Service.
- (b) Sanitation—

The sanitary organization and administration

of a division on active service in Canada, and the problems connected therewith.

Field Service Regulations, Part II.
Manual of Elementary Military Hygiene.
Standard works on Military Sanitation.

(c) Laws and Customs of War, especially as regards the Convention of Geneva.
Manual of Military Law, Chapter XIV.

Major's Certificate.

(a) Organization and Administration.

(b) Sanitation. (Written examinations.)

(a) Organization and Administration—

The medical organization and administration of units on active service in Canada and problems connected therewith.

R.A.M.C. Training.

Regulations, Canadian Medical Service.

Manual of Equipment, Canadian Medical Service.

Field Service Regulations, Parts I and II.

War Establishments, Canadian Militia.

Canadian Militia Mobilization Regulations.

Standard works on the strategical and tactical employment of the Medical Service.

(b) Sanitation—

The sanitary organization and administration of units on active service in Canada and problems connected therewith.

R.A.M.C. Training.

Field Service Regulations, Part II.

Manual of Elementary Military Hygiene.

Standard works on Military Sanitation.

Lieutenant's or Captain's Certificate.

(a) Administration. (Written examination.)

(b) Sanitation. (Written examination.)

(c) Drill and Exercises, etc. (Practical examination.)

(a) Administration—

R.A.M.C. Training.

Regulations, Canadian Medical Service.

Manual of Equipment, Canadian Medical Service. Pay and Allowance Regulations.

(b) Sanitation—

R.A.M.C. Training.

Manual of Elementary Military Hygiene.

(c) Drill and Exercises, etc.—

Squad and Company Drill, Corps Exercises.

Map Reading and care of horses and transport.

Infantry Training.

R.A.M.C. Training.

Manual of Map Reading and Field Sketching.

Memorandum for Camps of Instruction, Parts I. and II.

Nursing Sisters.

(a) Administration. (Written examination.)

(b) Practical.

(a) Administration—

Regulations, Canadian Medical Service.

Standing Orders, Permanent Army Medical Corps.

R.A.M.C. Training.

Manual of Elementary Military Hygiene.

(b) Practical—

Dental Surgeons.

Administration—

Regulations Canadian Medical Service.

Manual of Equipment, Canadian Medical Service.

Quartermaster's Certificate (As in Appendix VI. 18 (b).).

Sergeant's Certificate.

Duties of a N.C.O. of the Canadian Medical Service—

R.A.M.C. Training.

Manual of Equipment, Canadian Medical Service.

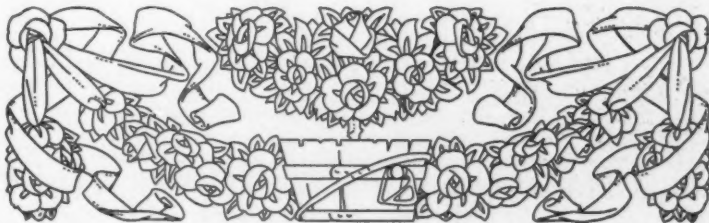
Manual of Elementary Military Hygiene.



PROMOTION EXAMINATION A. M. C.

Promotion examinations will be held for qualification for the ranks of Major and Lieutenant-Colonel in the Army Medical Corps on Tuesday, 12th May, 1914. The details will be in accordance with Militia Order 187, 1912.

Applications must be received on or before 1st May, 1914.



? ? Ethics ? ?

It is high time this abominable practice stopped. Is it any wonder Quackery flourishes when the Medical Press so far forgets itself? Will the daily press also cleanse itself?

GET THE PROOF FIRST

That Gall Stones, Bright's Disease and Other Kidney Diseases Can Be Cured

These dread diseases, generally believed to be incurable, yield readily to the curative properties of **SANOL**. **SANOL**, the greatest medical discovery of modern times, is revolutionizing the treatment of all diseases of uric acid origin.

WE HAVE THE PROOF THAT **SANOL** CURES

We can give you the names of hundreds of Winnipeg citizens who have been cured by **SANOL**; we can give you the names of people in every section of the Dominion who have used **SANOL** with like results.

Read What These Men Say of **SANOL**:

One is a prominent Winnipeg wholesale grocer, the other a well-known citizen of Carman.

Carman, Manitoba.
THE SANOL MANUFACTURING CO., Limited,

Winnipeg, Man.
Dear Sirs.—For those who may be sceptical as to **SANOL**, I wish to say that I had been confined to my bed off and on for five years. My case was chronic, Bright's disease with dropsy. I was tapped at least thirty-five times, but doctors held out no hope for me. After returning from treatment in the General Hospital, Winnipeg, I was advised as a last resort to try **SANOL**. The effect was simply wonderful. The dropsy gradually disappeared, beginning from first week's treatment. After four months' treatment I am now enjoying good health, and was it not for my advanced years (72) I would feel like a boy.

(Signed) **GEO. CLARK.**
P.S.—I must thank my dear friends in Winnipeg for sending me the **SANOL**.—G.C.

Dear Sirs.—I have seen several testimonials in the paper of people who suffered with their Kidneys, and were cured with **SANOL**, so I think it is a duty I owe the public to let them know also my experience. I suffered for a long time with stones in the Kidneys, and have to say, like everybody else, "tried everything known to the medical practitioners, except an operation, but found no relief." I was for two days in bed suffering untold agonies, and had to get several injections of morphine to relieve the pain, when an old friend of mine, a Mr. McColl, called on me and induced me to try **SANOL**; the second day I had taken it I had a little relief, the third day I was up in bed, and when Mr. McColl called me up on the phone the fourth day I was able to go down stairs and talk to him, and tell him what a wonderful cure **SANOL** was. A week from the first day taking it I was back in my office doing business, but continued taking it for three weeks after until I passed the Kidney stone, which stone I always will keep to show anyone who is suffering like I was what **SANOL** has done.

Please use this letter for publication and send copies to everyone in Canada, as everybody should and must know about a cure which you have. Also refer them to me for further information, as I could write all day, and then would not have told you all I think about **SANOL**.

I cannot go on paper, wish you the success I wish. Yours sincerely,
THOM. JOBIN,
Of John, Marvin & Co., Ltd., Market Street, City.

SANOL, the only known cure for kidney troubles, is manufactured right in Winnipeg. No other medicine has ever met with like success. Only about two years ago it was first offered to the Canadian public, and now its sales are enormous.

In Halifax one druggist has handled over 600 bottles of **SANOL**, and has been so impressed with its efficacy that he has become a stockholder in the Sanol Manufacturing Co.

SANOL Endorsed By Eminent Physicians

The wonderful curative powers of **SANOL** have won for it a high place in the estimation of the medical profession, and many physicians are now using it exclusively in their treatment of kidney diseases.

We have scores of letters from physicians telling of wonderful cures effected, and stating their faith in this great remedy.

SANOL can be obtained at all druggists.

PRICE, \$1.50 per bottle.

Remember, no matter how long standing a case of kidney trouble you may have, **SANOL WILL CURE**

SANOL MANUFACTURING COMPANY, OF CANADA, LIMITED

975 Main Street, Winnipeg, Canada

Also Manufacturers of
SANOL Anti-Diabetes—for Diabetes. **SANOL** Blood Salt—for Indigestion
SANOL Blood Builder—for Anæmia.

FROM THE DAILY PRESS OF MARCH 9th, 1914.

DOCTOR, TRY THE

SANOL — EXPURGO

(Preparations)

Made of herbs and herb-extracts exclusively.

SANOL'S ANTI-DIABETES (in Canada)
EXPURGO ANTI-DIABETES (in U.S.)

the most effective Remedy for Diabetes known to the medical profession.

BECAUSE it eliminates sugar from the urine.

BECAUSE it DOES cure and HAS cured Diabetics, under the supervision of physicians.

BECAUSE it is particularly efficacious in the healing of the diabetic gangrene.

BECAUSE it is perfectly harmless to the organic system and contains no poisonous or injurious ingredients whatever.

BECAUSE many physicians of high standing prescribe it with excellent results.

SANOL (in Canada) **EXPURGO LAPIS** (in U.S.)

an unexcelled solvent for gall—kidney—and bladder stones.

BECAUSE it dissolves and removes gall stones painlessly.

BECAUSE it has proven very beneficial to the genito-urinary tract on account of its selective action of its constituents.

BECAUSE it disintegrates kidney—and bladder stones which can be proven by the brick-dust sediment in the urine.

BECAUSE it increases the flow of urine, eliminating the usual waste products of metabolism.

BECAUSE it makes many operations unnecessary.

The Formula is at the Disposal of the Physicians

The Sanol Manufacturing Co., Limited
Winnipeg, Manitoba

FROM A CANADIAN MEDICAL JOURNAL

Meetings and Reports

A CHAPTER OF GOOD THINGS

The Chicago Medical Society will hold its Third Annual Meeting of Alienists and Neurologists of the United States, for the discussion of Mental Diseases in their various phases, July 14th to 18th, 1914.

It is the object of the Society:—

First—To have a scientific program. The titles of papers already received for this meeting, indicate such a program, including research work, that will be beneficial to every physician, whether connected with an asylum, sanitarium, or in general practice.

Second—One that will be educational to the public as well, therefore, one day is to be devoted to the discussion of the prevention of insanity and the conditions causing Mental Defectives, to which the public will be invited.

Committees have been appointed to report on the causative factors, in acquired Insanity and Inherited Mental Defectives, from Alcoholism, Epilepsy, Infectious Diseases, especially Syphilis, and the effect of environment upon Mental Defectives, in their relation to Criminology.

Resolutions will be introduced and discussed, for the framing of such laws, that will, in a reasonable measure, prevent these conditions, and such resolutions will be presented to the various State Legislatures, and the National Government for their consideration.

Third—A committee will report on what constitutes a Modern Hospital or Asylum, and what the duties of the State to the physician who makes the care of the insane and mental defectives a specialty.

Arrangements have been made with the Post Graduate Schools of Chicago, to give a complimentary course in all lines of work for the remaining days of July. This course will embrace Internal Medicine, Surgery, and special Regional Surgery, Cystoscopy, X-ray, Brain Pathology, Vaccine making, and Wassermann reaction, etc. The superintendents and attending physicians are invited to avail themselves of this opportunity for the complimentary course. Tickets for admission to this course can be obtained free from the Secretary during the meeting. All communications should be addressed to Dr. W. T. Mefford, 2159 West Madison St.

THE CANADIAN ASSOCIATION FOR THE PREVENTION OF TUBERCULOSIS

14th Annual Convention

will meet in

HALIFAX, N.S.

JULY 13th and 14th

ONTARIO MEDICAL ASSOCIATION

will meet in

TORONTO, ONT.

May 26th, 27th and 28th

Dr. F. Arnold Clarkson, Secretary.

**THE ONTARIO HEALTH OFFICERS
ASSOCIATION**

will meet in

Convocation Hall,

TORONTO, ONTARIO

May 7th and 8th

THE CANADIAN MEDICAL ASSOCIATION

will meet in

ST. JOHN, N.B.

July 7th, 8th, 9th and 10th

FOURTH ANNUAL CONGRESS

— OF THE —

CANADIAN PUBLIC HEALTH ASSOCIATION

FORT WILLIAM . . . PORT ARTHUR

1914—SEPTEMBER, 10-11-12—1914

The Sanitary Inspectors' Association of Western Canada

President—E. W. J. Hague, Assoc. Roy. San. Inst. Vice-Presidents—Western Ontario, W. E. Stanley, Assoc. Roy. San. Inst., Manitoba, P. B. Tustin, Assoc. Roy. San. Inst.; Saskatchewan, Thos. Watson, Assoc. Roy. San. Ins.; Alberta, J. J. Dunn, Assoc. Roy. San. Ins.; British Columbia, F. L. Glover, Assoc. Roy. San. Ins. Executive Committee—W. J. T. Watt, Cert. Inc. San. Assoc., Scotland; Arthur Rigby, Assoc. Roy. San. Ins.; W. F. Thornley, Assoc. Roy. San. Inst.; F. J. Johnson, Assoc. Roy. San. Inst. Secretary-Treasurer—Alex. Officer, Cert. Inc. San. Assoc., Scotland.

SANITARY PLUMBING

Read before Winnipeg Members By James Smith, Chief Plumbing Inspector, City of Winnipeg, Man.

IN considering the question of Sanitary Plumbing, it is advisable at the outset to get the proper attitude to plumbing in its relation to public health. The popular fear of sewer gas, and the general belief that it was responsible for all or most of the infectious disease in cities, such as scarlet fever, enteric fever, diphtheria, etc., still exists to a considerable degree in the minds of the public at least. It is now generally agreed that this dread of sewer gas or sewer air which existed in the minds of sanitarians of an earlier generation was exaggerated, and comparatively recent bacteriological investigations and experiments have completely exploded the theory that there was any direct connection between sewer gas and infectious diseases. Experiments carried out by eminent bacteriologists all over the world go to show that the air in sewers contains considerably less and in most cases only about half as many bacteria as are present in the street air, and it was also noted particularly that the kinds of bacteria in sewer air were the same as in street air and not the same kind of bacteria that are peculiar to sewage. The explanation of this phenomenon is no doubt due to the retention of the bacteria on the moist walls of the sewers. Although bacteriologists have disabused our minds of the fallacy in connecting sewer air with certain infectious diseases, there is still another phase of the question to be considered which is probably not less important, and that is, the predisposing action of sewer air. It has been clearly demonstrated that persons subjected to an atmosphere of sewer air in a more or less concentrated

form will suffer from languor, headache, nervousness, and sickness, and in extreme cases, death has resulted. We may, therefore, assume at least that the vitality of persons living under such circumstances is materially lowered and so are predisposed to the ravages of more dangerous diseases.

It will thus be seen that while the earlier theories associating typhoid fever, diphtheria, and other kindred maladies with sewer air were unjustified, it is certainly true upon ordinary insurance principles that it is wise to prevent, as far as possible, the entrance of sewer air into buildings, and municipalities are justified in taking means to this end, which brings us to the consideration of Sanitary Plumbing.

Mr. J. J. Cosgrove, an eminent sanitary engineer, sets forth the following requirements of a perfect system of plumbing.

1. An adequate supply of water sufficient in volume and pressure to flush the various fixtures.

2. Types of fixtures that are made of porcelain enamel, and are set open, and located in well-lighted properly ventilated rooms.

3. A system having waste pipes large enough to carry off all waste matter discharged into them, yet not so large as not to be self-cleansing.

4. A system of ventilation so planned as to properly ventilate every portion of the drainage system.

5. A quality of piping that will neither corrode easily nor be affected by sudden changes of temperature, and the joints of which can be made as strong as the pipes themselves.

6. A properly graded, perfectly gas and watertight system that will discharge by gravity.

7. A system uniformly supported throughout its entire extent, that can neither settle nor swing nor can pull at any of its branches.

8. A system of installation that provides turns and offsets of easy angles; that connects its branches at such an angle as not to interrupt the flow of sewage in the main, and that provides cleanouts at such points that the inside of the drainage system is accessible throughout its entire extent.

The foregoing is a very comprehensive resume of the requirements of good plumbing and well worth the efforts of all sanitarians to attain, and I will endeavor to show you in the short time available, and in as interesting and instructive a manner as possible to what extent we in Winnipeg have progressed toward the objective of good plumbing.

Water Supply to Fixtures.

Results of bacteriological investigations have shown that more disease enters a building through the water supply than from the drainage system. One of the cardinal principles of plumbing is that no direct connection shall exist between the water supply and the drainage system, which was the earliest reason for setting the flush tank above the fixture, although there are other reasons why this should be done. In some of the first types of water closets used the water level in the bowl and flush tank were the same, the result being that when the water was shut off at the stopcock, or when the pressure diminished, the water in the flush tank, which was sewage polluted, was syphoned into the water main, and when the water was turned on again this sewage polluted water was distributed throughout the water system with disastrous results. Where storage tanks not under pressure are used they should be placed in cleanly, airy surroundings and should be covered and ventilated. This is an important matter, as water has an affinity for most gases and absorbs impure air very readily.

Types of Fixtures and Location.

Little need be said regarding types of fixtures used to-day as the manufactur-

ers have left little to be desired in this connection. Vitreousware and porcelain fixtures are doubtless the most sanitary material for construction on account of the ease with which they are kept clean, but the cast iron porcelain enamelled fixture so commonly used here proves a very satisfactory substitute at a reasonable cost.

The location of plumbing fixtures leaves much to be desired at the hands of architects and the public. At one time any odd corner in a house or building that could not be used for anything else was considered good enough for plumbing, but happily, by generous education and wise legislation, this state of affairs is gradually being eliminated, and to-day the bathrooms and lavatory rooms are among the most attractive appearing rooms in the building. It is generally conceded that a fixture is usually in a sanitary or insanitary condition in direct ratio to the amount of light with which it is provided. In the plumbing By-laws of most cities special stress is placed on having the water closets in houses situated in rooms having external windows. The ventilation of water closet and urinal compartments is of much moment from an aesthetic as well from a sanitary point of view, and since we made it compulsory some years ago has met with popular approval. The sizes of the local vent pipes prescribed (3 square inches in cross sectional area per fixture) have been adversely commented on in some quarters, but our difficulty has been to provide ventilation without changing the air in the compartment too often and thus lowering the temperature to a marked extent. In this country the conservation of heat in a building in winter time is a factor that must be considered more than in countries enjoying temperate climatic conditions.

A Self-cleansing System.

It is a difficult matter designing a system of plumbing that will be self-cleansing, where we have, as in Winnipeg, a combined sewer system. All calculations for the sizes of piping are based on the rainfall and provision made to carry off storm water. This necessitates the drains in large buildings in particular being larger than would be the case if provision had only to be made to carry off the sew-

age. As illustrating this point, I may say it has been found from measurement that the total amount of sewage passing a given point in the house drain in a certain period of time, is less than one-fortieth the amount of rain water that during excessive rain storms will pass the same point in an equal period of time. It will thus be readily seen that where provision has to be made for storm water, the question of self-cleansing action is lost sight of so far as the size of the pipe is concerned. The combined system of sewers, however, has many compensations, chief of which is the very effective flushing of sewers and drains during rainy weather.

There are a number of formulae for determining the size of drains, but for ordinary purposes one square inch of area in the pipe to every 250 square feet of roof area to be drained will be found satisfactory. The sizes of waste pipes vary in general practice from 4 in. and larger for water closet soil pipes to $1\frac{1}{4}$ in. for lavatory basin wastes. No waste pipe should be less than $1\frac{1}{4}$ in.; particulars of these may be obtained from the various City By-laws.

Ventilation of Plumbing System.

The method of venting the plumbing system has been the subject of more discussion probably than any other detail of plumbing work, and most authorities agree that the possibility of syphonage has been exaggerated in the past. The principal function of a vent pipe is to provide a supply of air to the outlets of fixture traps, to prevent the water seal being broken, either by syphonage or back pressure. In a great many cities, what is known as the separate system of venting, is followed, which consists in providing a vent pipe for each fixture waste irrespective of its position or the necessity for venting, which is to say the least of it, an unwarranted extravagance. In Winnipeg, as in several other large cities, we adopted some years ago the circuit or continuous vent system, whereby each fixture waste is vented, although not always separately, and our experience has developed no good reason why we should change our methods.

In recent years the use of non-syphon traps has come into vogue to a very extensive extent, and it is claimed for them that

they cannot be syphoned, and therefore do not require to be vented. Apart altogether from the question of whether they can or cannot be syphoned, there are many other reasons why they should not be used and also why vent pipes are necessary. Too much emphasis has been laid in the past, as I have already said, on the possibilities of syphonic action occurring and other points equally important have been missed. A basic rule of good plumbing is that every pipe should have a free circulation of air through it, not only to prevent syphonage, but to preserve the piping from the action of stagnant gases and also to insure the effective discharge of waste matter through the pipes. A plumbing system is very much like a human being and requires plenty of fresh air if it is to attain its maximum efficiency and have a long and useful career. Most forms of non-syphon traps are open to two objections in their construction, i.e.: They are not self-cleansing in action, and have interior partitions, either or both objections being sufficient cause to condemn them. The P. trap, with a continuous vent, is the cleanest and most sanitary form of construction. The S. trap, with a crown vent, so long a favorite with the craft, has been relegated to the scrap heap, as experience has taught us that this form of vent very readily gets blocked.

Quality of Piping and Joints.

In the earlier days of the plumbing craft lead piping with soldered joints was used almost exclusively, but modern practice demands more rigid construction and the use of lead piping is reduced to a minimum, being only used for short branches into fixtures. Cast iron pipe with caulked lead joints is the form of construction most generally used, but in high buildings galvanized wrought pipe with screwed joints and recessed drainage fittings has proved more satisfactory, as it withstands the greater tensional strain to which it is subjected, than cast iron piping, and is more flexible. In all cases the drains under ground are constructed of cast iron, as wrought iron piping, even when galvanized, corrodes readily in the ground. To a limited extent nickel-plated brass pipe is used for waste pipes, particularly for baths, basins and fixtures requiring wastes exposed above the floor.

The "roughing in" of a plumbing system should be well balanced, that is to say, each part of it whatever the material used in construction may be, should have some relation to the other with respect to their lasting qualities, so that one part of the system will not have worn out before the other to any marked extent.

A Properly Graded System—Gas and Water Tight.

For general practice it has been found that a grade of $\frac{1}{4}$ of an inch per foot gives good results, although many satisfactory systems have been installed where it was impossible to give more than one-eighth of an inch per foot. Care must be taken not to give an excessive grade, as in that case the water runs off quicker than the more slowly moving solids, and leaves a condition almost as bad as if there was a poor grade. Pipes of small diameter offer greater frictional resistance than those of larger diameter, and should therefore be given a greater fall to produce the required velocity. The question of a system being gas and water tight is cared for by the water test in the "roughing in" work and the smoke test on the final completion of the job. Most cities call for the water test, but I regret to say that comparatively few insist on the smoke test, which, in my opinion, is of equal importance to the water test. The defects discovered by smoke test, both in piping and fixtures, are such that no other test could have revealed, for instance, lead piping into which nails have been driven when laying floors, and defective traps in syphon jet closet bowls, which allowed drain air to escape around the flushing him, as well as a multitude of other defects.

A System Uniformly Supported.

Soil and waste stacks should be firmly supported at their base, and if in a building over two storeys high should be supported at every joint, and wrought iron at least every ten feet. Lead pipe requires to be supported its entire length.

A System of Installation With Easy Angles and Providing Cleanouts.

A very safe rule to go by in making connections to or changing direction of piping is, in connecting to perpendicular piping use T. Y.'s; and in changing the direction of either perpendicular or horizon-

tal piping use 45 degree bends where possible. Cleanouts should be provided on the drain at a convenient point inside building, so that the house sewer can be rodded out to the main sewer, and cleanouts should also be placed at the foot of every stack, at all changes in direction of the drain, on every trap on the system, and on all horizontal runs of soil or waste pipe.

House Trap

Some years ago a Departmental Committee of the British House of Commons was appointed to inquire into the merits and demerits of the house trap. Their report, issued about a year ago, is the last word on the subject, and prove statistically and practically that the house trap is an abomination to be avoided in the British Isles. We have also experimented with and without the house trap, and at the present time there are over ten thousand systems of plumbing installed without house traps. For a number of years previous to this year, the insertion of the house trap was optional, but this year as a result of circumstances which we could not control we were forced to return to the old system of installing house traps. It was found that when the house trap was dispensed with the air passing down through the manholes on streets and up through the plumbing system, lowered the temperature of the sewers during the winter to such an extent that in a period of about 15 months 129 frozen house sewers were reported at the City Engineer's Office, and there were probably as many more not reported. In the same period of time 75 main sewers were frozen, some measuring 2 ft. 6 in. in diameter, and ranging in depth from 8 to 25 feet below the street level. The house sewers frozen were with few exceptions connected to main sewers close to manholes. It will thus be seen that we are using the house trap simply to prevent free circulation of air through the house sewer, a very poor practice, but one that seems justified until some improved scheme of ventilating the main sewers than by open manholes on the street is discovered.

In consequence of the extreme climatic conditions experienced during winter, it is necessary that unusual precautions be taken to prevent freezing in air and gas as well as waste and water pipes.

The closing of pipe terminals at roofs is the most prolific cause of trouble in Winnipeg, and after a period of extreme cold weather it is the exception rather than the rule to find a pipe terminal without a snow cap partially or wholly closing the pipe.

The method shown has not been entirely satisfactory, and we intend carrying on experiments this winter to determine whether better results cannot be obtained by increasing the pipe size 2 inches and finishing it flush with the roof, with a lead flashing caulked into a hub. I may state, for the benefit of those not familiar with the aforementioned conditions, that the closing of pipe terminals is due to the suspended moisture in the air passing out of the pipe, being condensed and converted into snow or ice immediately on coming into contact with the cold outside air.

The minor troubles incident to this climate are legion and most of them can be avoided by careful construction; but there

are others which no amount of foresight can obviate. This is particularly the case in buildings which have remained empty throughout the winter without being heated. Where such conditions have existed, it is not uncommon to find that, with the exception of the external walls, the whole building has been raised 3, 4 and in extreme cases as much as 6 inches, due to the moisture in the ground under the building freezing and expanding, and lifting the entire building. It may be imagined that this works havoc with the plumbing system; lead joints in soil pipes are pulled apart, water pipes are broken, and I have known instances where 6 in. x 6 in. wooden beams have been snapped in two just as one would break a match.

In conclusion let me say that in recent years the tendency in medical and other professions has been to put prevention before the cure. The old adage that "prevention is better than cure" is none the less applicable to plumbing.

Sanitary plumbing is preventive medicine in its fullest sense.

Monthly Jottings.

A PAPER on "Sanitary Plumbing," by Mr. James Smith, Chief Plumbing Inspector, Winnipeg, Man., is published in this issue of the Journal. This is the first of a series of papers on subjects of interest to our members. In deciding to publish these articles, the Executive Committee had in mind that a number of inspectors are situated in outlying parts of the country, far removed from their fellow inspectors, and with little opportunity of ascertaining how work is performed in other places. Moreover, a number of our associate members are studying with a view to obtaining a certificate of proficiency, and it is hoped that these articles will be of assistance to such.



The class of instruction in Sanitary Science, held in the Health Department of the City of Winnipeg, has proved of great

value. The meetings are held from 12 to 1 o'clock each Saturday. Lectures and papers are given on alternate Saturdays, the other Saturdays being reserved for general discussion of sanitary matters. We are informed that a similar class has been arranged in the Health Department of the City of Regina, and we can recommend their adoption in every city where a sufficient number of members can be got together. In the large centres, where the departments are divided into bureaux or divisions, an inspector working in one division, has, at these meetings, an opportunity to become acquainted with the work that other branches of the staff are trying to accomplish, and thus avoids becoming side-tracked in a narrow groove of work in his own division. This is a danger under the sub-division system. We need good, all-round men, able to view the work of the Health Department as a whole. By meeting together, the members of the various divisions become better acquainted with the work as a whole, and not only so, but the meetings afford an opportunity for exchange of opinion.

The Royal Sanitary Institute of Great Britain propose to set up Examination Boards in various parts of the Dominion. For the Prairie Provinces the following board has been appointed:

Chairman—A. J. Douglas, B.A., M.D., C.M., Medical Health Officer, Winnipeg, Professor of Hygiene, Manitoba Medical College.

R. M. Simpson, M.D., C.M., Chairman of the Provincial Board of Health, Manitoba.

Gordon Bell, B.A., M.D., C.M., Provincial Bacteriologist, Professor of Hygiene and Pathology, Manitoba University.

E. Brydone-Jack, B.A., C.E., Professor of Civil Engineering, Manitoba University.

J. Pender West, M.R.I.C.A., Vice-President of the Manitoba Architects' Association.

Hon. Local Secretary, P. B. Tustin, M.R. San.I., Chief of Food and Dairy Division.

Offices of the Board, Health Department, Winnipeg, Manitoba.



At an examination for Inspectors of Nuisances, held in Winnipeg, Manitoba, on October 29 and 30, 1913, four candidates presented themselves. The following three candidates were certified, as regards their sanitary knowledge, competent to discharge the duties of inspector of nuisances: Douglas Little, Winnipeg; Percy Pickering, Winnipeg; Herbert Samuel Sturgess, Winnipeg.

It is proposed to hold examinations twice yearly, in April and October. The Executive Committee hope that a large

number of our associate members will present themselves at the forthcoming examinations.



It has been suggested that inspectors in small towns and rural municipalities who meet with difficulties might have questions answered through the columns of this Journal. Our space in the Journal is not unlimited, but any questions of general interest upon which advice is required will be answered. The questions should be directed to the Secretary.



Our membership is slowly but steadily increasing, but unfortunately a few of our 1913 members have not yet renewed their membership for the present year. The Association was formed with the object of raising the standard of efficiency amongst sanitary inspectors and others engaged in Public Health work, besides strengthening the position of such, and as unity in strength we hope that every inspector in Western Canada will affiliate.



It has been decided to hold the annual meeting at Winnipeg on 15th, 16th and 17th July next. We feel sure that the Winnipeg members will give all inspectors a hearty welcome; and will do all in their power to make the time not only pleasant but profitable.



GINGERING UP THE SALES FORCE

By TIM THRIFT

A SALESMAN as a personal unit can be argued with, pleaded with, threatened, coaxed or urged and he will probably do in the end just what he intended to do in the beginning, if you don't so antagonize him that he is lost altogether; but put him with other units, enthruse the larger unit, and he will work like a veritable nailer. The reason is simple.

As a part of that unit he is carried along by the enthusiasm and personal appeal of the majority. He is part of a cause; he cannot desert his fellows; the success of others, of his friends and competitors, rests in proportion upon him. He realizes that he must do for others even when he would not do for himself. Thus he puts forth all his energy that he may stand well in the eyes of his comrades and win applause for his clan in the cause. This accounts in a measure for the success among salesmen obtained when put to work with others. Alone, with only themselves to account to, they make a failure, because they can so easily satisfy a personal conscience. But when that conscience becomes a composite one, their pride comes to the fore and they put new vim into their work and create within themselves new incentive. The good sales manager realizes these things in dealing with salesmen and plays his pawns upon the board accordingly.

So he calls to his aid such natural means as contests of various kinds to keep his forces enthused and gingered up. More, he appeals to the mature mind of them with keen judgment, squareness and appreciation and he satisfies their boy nature with games of chance, making them the players and filling the side lines with interested spectators.

Before there can be contests, however, it is necessary that some basis of figuring individual sales be arrived at. This is a problem which often presents many perplexities. Many businesses are not old enough to predetermine the possible business to be expected from a given territory based upon possible users of the product in that territory, either as a unit or by avocation.

In our particular case it was decided to take the total sales of each man for a year back, find the average monthly sales, and then make individual comparisons, based upon a fair and equitable estimated increase, which increase was in turn based on careful investigation of general business being done in our field in principal commodities in various sections of the country. The contests were then based upon the per cent. of the quota made by each division office or salesman. For example, the office making the highest per cent. of their quota in any particular month in which a contest was on, won a prize then offered, the same going to the division manager. The salesman making the highest per cent. of his quota received the prize individually. Only actual business was figured in all contests, and the figures were based on the orders themselves, except in the case of distant offices, when a telegraphic report was accepted, to be confirmed later. Then there was little chance for error. Reports on the previous weeks' sales with result of standings were published on the following Friday. At first the per cent. of the quota was given for each office and salesman, but later this was changed and the position alone indicated. Whenever an office or salesman made 100 per cent. of the quota, a star was given, and for each additional 100 another star added.

Our first sales' contest was for the first six months of 1911. This period was divided into two quarter periods. The following prizes were put up: To the division manager making the highest per cent. of his quota for the entire period \$200 in cash, a diamond or a set of dining room furniture of equal value. To the salesman making the highest per cent. \$150, Howard watch or silver service of equal value. Each manager or salesman making his quota for the first three months received a pair of gold cuff links, and for the second three months a watch fob with his initials on it. Thus in addition to the big prizes, it was possible to win lesser prizes by making 100 per cent. or better of the quota for three

months and six months. Beginning with March, slogans were adopted for each month.

Copies of those slogans for framing were furnished each office every month, and these were placed in a conspicuous place, where they would be seen each day and have a silent influence. In April and June special stunts were worked. The first one, which was used in April, was the pledge plan.

This pledge was sent out in duplicate. One was signed by each manager and salesman and returned to the home office; the other was retained. As fast as the signed pledges came in the names were put on the honor roll in the House Organ, and labeled button reading "I have taken the pledge" sent to each man. This button attracted a great deal of favorable attention. It always required some explanation. Prospects hearing of the contest are drawn into participation in it through their inherent love for anything that smacked of a fight. Business came rolling in. The month closed with many quotas made and others showing a higher percentage than before. In fact, a new record was established for April business, beating any previous April by more than 30 per cent. Now, the psychology of it! A pledge is a sacred thing. To take a pledge means a man's assuming a certain moral obligation. Few men take any sort of pledge lightly. While the pledge in this instance was semi-humorous it caught the fancy of the men, and they were glad to enter into the spirit of the thing.

In June the stunt was totally different. The general sales manager went on his annual vacation. The day after he left the sales and reports for the first two weeks of the month came in. They were rather disheartening, for the figures showed that the sales, despite the contest, were far behind the same month of the previous year and the month before of that year. Something had to be done. A surprise party was determined upon. That night a lettergram went to each division and branch manager, giving a brief outline of the idea, and offering the suggestion that the boys surprise their general sales manager. It warned them to be on the lookout for the special issue of the Company's House Or-

gan, which would explain the plan in detail.

Two days later the Special followed. It suggested to the men that this was an opportune time to show the general sales manager what they thought of him. It contained a signed request from both the advertising manager and assistant general sales manager.

The latter part of the week another Special issue went out. In the meantime many of the managers had replied to the lettergram pledging their support. Their replies were printed verbatim with appropriate comments.

The assistant general sales manager was busy at the same time with inspiring letters to the men in the field encouraging and enthusing them. The last week of the month two more Special issues of the House Organ bombarded them with more letters. The month closed in a blaze of glory. What promised to be a disastrous period was thus turned into their largest month in the company's history and a gain of 46 per cent. The general sales manager came back to find a surprise awaiting him indeed, and a surprise that warmed the cockles of his heart.

This stunt was based on a trait of human nature. Every man likes to get a surprise. There is a peculiar appeal to this, which dates back to childhood. Salesmen were quick to take advantage of the opportunity not only to show their leader what they could do but to make it totally unexpected as well. Although they could not be present personally to see the look of astonishment on his face when shown the month's business they had rolled up, they could readily imagine the scene and take huge enjoyment in it. In these two stunts the primal factor was taken into consideration. It is a factor, which all successful sales managers rely and plan upon. Salesmen are boys grown up. The sales manager who plays upon the boy nature of his men gets the highest per cent. of efficiency. I have had that point debated by sales managers, but at least I have never been convinced—they say a man convinced against his will would be of the same opinion still, and I am going to explain why I believe this to be true. The reason for this is very simple. The selling game is keenly competitive. In the highest

branches of it particularly men are under a constant strain. Because of this they become at times sensitive, high strung animals, and only the saving grace of the boy heart of them keeps the balance. Sales contests, in turn, are simply turning to commercial purposes the campaigns of boyhood. A salesman takes his main delight in pitting his brain and skill against those of others in his organization, as he did in matching his muscular strength against the champions in earlier days. The prizes are bigger and the recognition of the world greater, as become contests of men, but the same spirit prompts the man as prompted the boy.

In July last year chances for another record breaking month did not look promising to us. The vacation season was on. The weather was hot and general business conditions were not good. A conference was called, which brought out the suggestion of a baseball contest.

Here was the line of reasoning: That the things uppermost in the mind of most red-blooded Americans at this season of the year—first, his vacation, second baseball. Since our salesmen obviously cannot go on vacations just now, the latter will have the strongest pull. The contest was carried out thus.

All division branch offices were divided into two major leagues. They were called the Americans and Nationals. In making the division, the Eastern offices were placed, in so far as possible, in one league, and Western offices in the other. Thus the natural rivalry between the two sections of the country was taken advantage of. A schedule of games was arranged. One series for the week of July 16th and the other for the week of July 23rd. Care was taken to pit offices of equal strength against one another, so that there would be a fair chance for all. Thus the New Yorks played against Chicago; Philadelphia against St. Louis; Boston against Cleveland, etc. The terminology of baseball was strictly adhered to. For instance, a run was \$100 worth of business; an error was losing out on a competitive deal; a base on balls was business secured easily, as having a prospect walk into the office and buy without slightest effort being expended on him. A foul was doing some-

thing which was not according to the accepted ethics of good salesmanship, etc. A score was kept by counting each hundred dollars' worth of business made by each office through the country. Fractions were not counted. Standings only were given at the end of each series of games and those were published in the House Organ together with baseball dope. A baseball pink sheet was issued each week as part of the House Organ.

New York Americans defeated the St. Louis Nationals by four runs. Toronto Americans swamped _____ Nationals by 17 juice tallies. Philadelphia Americans had a close game with an Francisco, Nationals winning in the 8th by three runs, etc. Short items on the players were also run, the managers being given the names of various well-known professionals in the clubs of their respective stations. This helped to create a baseball atmosphere and add to the interest of the game. This gave the opportunity to give ginger talk as well.

Now, for the effect this stunt had on the organization. It was recognized at the start that the men in common with most of us were fans. Therefore putting them in teams, arranging a schedule and playing them against worthy opponents, was to arouse all their fighting blood. They were boys again on the corner lot. Some of them had been local wonders in their day. These particularly felt the lure of the fight. Though purely imaginary, they played the game with all the enthusiasm of the days when they were slab artists. The results was inevitable, because the right cord had been struck. The month closed with a big percentage of increase. Again the boy heart had been appealed to, and not in vain.

Soon after the close of the baseball contest another was commenced. This was of a different character, but of six months' duration, as was the first one. It should be borne in mind that the three contests I have mentioned were but part of a bigger contest extending over the first six months of 1911, as previously noted. This six months' contest closed the first of July with wonderful returns for the period it ran. The second big contest started September 1st and ran until March 1st, 1912.

This contest had for its prize a Hupmobile runabout and was open to all division and branch managers and all salesmen. The contest was announced in the August 30th issue of the Company's House Organ, each page of which was decorated with an exploding bomb.

This special issue also contained articles on the contest from the various officials of the company and an insert. This insert was a bright red reproduction of an exploding bomb, and had this wording on: "To get busy quick sit on this."

In the early issue in September some opinions on the contest from sales forces were printed. These were inspiring, and almost invariably closed with mention of big sales made, showing that the men were getting into the contest early.

A slogan was adopted soon after the contest started, and this was printed under an illustration of the Hupmobile; it was "Hunk for the Hup."

The latter part of November the first impetus of the new contest had worn off and it was necessary to start something new to live up the men. In other words, another contest within a contest was required. Two suggestions were made. The first of these had to do with the creation of character in the business, which would be somewhat on the order of the Little Paint Man of the Sherwin-Williams Company or the Dutch Painter Boy of the National Lead Company. This character was duly created and introduced. It was given the name "Quota Quick," and was quickly adopted by the Multigraph men.

The latter part of November "Quota Quick" started sending out personal post cards to the men in the field. These were mailed practically every day and were soon eagerly watched for. They were printed on bright colored cardboard and always up to the minute.

These cards undoubtedly had an important bearing on the final results, for fully as many as 20 stars showed on the scoreboard at the close.

The second stunt was introduced through insert in the House Organ of November 23rd. This insert was headed as follows: "North Pole Special." It contained this special message from Santa Claus signed by him:

I will read the printing part. Here is the plan: "I have arranged with the edi-

tor to have a big Christmas tree in every issue during November. On the tree I have left a space for every division and branch office to hang up prizes. Of course I want to receive a present from all of you that would be useful and which is useful for the good old Multigraph Company. Then I figured out that we just designate this present in the form of per cent. of your quota. That is, when you see the tree with all presents on it you will see the figure of your quota from the 1st of December to whatever date it may be, so you can tell at a glance just what kind of presents you are giving to the company." On the reverse side of the insert, the advertising department advised the men that this issue had been gotten out as a special favor to Santa Claus; that he had put up his plan to the advertising manager. And this meant it was intended to give all men in the field an opportunity to judge it for themselves. The idea took strong with the men from the start. The novelty of the stunt appealed to them. It presented an opportunity to give the company a present. At a previous time they had given their general sales manager a shower of presents. Now the whole company would share in their generosity. Each mentally resolved that his prize would be bigger than the other fellow. Each made up his mind individually that his would be no piker present. The first glimpse of the Christmas tree was given in the issue of the House Organ on November 8th.

The illustration was 7 x 10, printed in green. Hung on the branches were packages, and imprinted on each package in red was the quota standing at that particular office to date. Rubber stamps bearing a little Christmas tree and slogan, "Multigraph Tree, what will your present be?" were procured and all mail going out to the sales force was stamped with this design in green ink. The figures on the packages on the tree grew larger and larger as the month advanced.

The men gave their Company a Christmas well worth remembering, and in return advanced their individual chances on the automobile and increased their bank balance.

The latter part of December, while the Christmas tree stunt was still in operation, another contest was announced. This was to run along with the big automobile con-

test, and to last indefinitely, or until the prize was finally won by one of the offices. This contest was called "Challenge Cup Contest." There is nothing very new in contests which have a cup for a prize, but this was worked out a little differently than the average contest of this description.

The cup was to be awarded to division and branch managers only. The manager making the highest percentage of his quota for any month got the cup for one month. Unless he could repeat, the cup went to another manager at the end of that time. To secure permanent possession it had to be won three consecutive times. Each time a manager won it, the office and date were engraved on the cup. Thus the manager who finally won the cup would have a complete record of all those participating in the contest. The more names the more glory in the end. The cup contest was received with great favor. It was considered a prize well worth while winning even for one month, and with all those names it would have when finally won a value out of all proportion to its original cost.

Now, gentlemen, I am going to insert a few remarks in this part of my talk, which I think you will probably rather joyously receive, and which I am rather ashamed to put in. The Challenge Cup ran for a period of two years, no office winning it three consecutive times, until very recently, when it left our possession through having been won the third time in Janu-

ary by the London, England, office.

After the introduction of this contest it was linked up with the large contest by the one running and offering of prize to means of the slogan, "The Cup and the Hup." Coupling up this new contest with change hands monthly injected new life into the Auto contest. And January closed the biggest month in the history of the company by some thousands of dollars. The score board revealed 34 stars in line in the standing, with the men on their toes as never before for the final month of the big contest.

In all sales contests and in all work of salesmen a certain amount of humor must be injected to keep up interest. If this is not done, if the business takes itself too seriously, monotony will creep in, which is fatal. Ginger talk must be written with the greatest care or it will bring with it after a time a suggestion that it is merely hot air and its effects will be lost.

As has been mentioned before, specialty salesmen are high strung animals, and they want the tension relieved at times. "Quota Quick" contributed his share to making the month close with a whirlwind finish. He once more resorted to his mailing cards and got out stories which ran during an entire month. Each one of them was distinctive. They were unquestionably instrumental in getting the salesmen gingered up and came as a cheery word from headquarters.

(To be Continued.)

A NEW PRIVATE HOSPITAL

FOR THE TREATMENT AND CARE OF ALCOHOLISM

and those addicted to Drug Habits, has been established at
622 Spadina Avenue, Toronto.

Correspondence Invited.

J. BRYCE McMURRICH, M.D.C.M., Medical Supt.

Phone College 186.

Phagocytosis.

Its stimulation in relation to Tuberculosis.

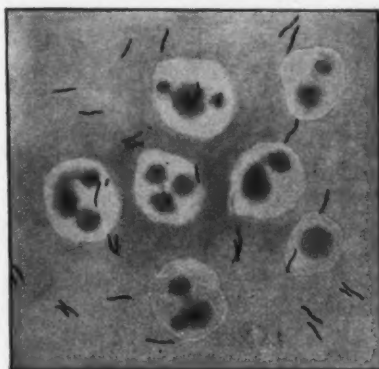
Convincing Evidence

TABLE OF RESULTS.

Duration of feeding with VIROL.	Average number of germs absorbed in 15 minutes by each Leucocyte.
0 weeks	1.1
2 "	1.3
6 "	1.5
9 "	3.8
12 "	4.5

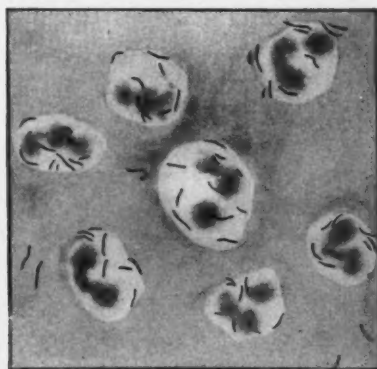
An elaborate series of investigations recently conducted at a well-known sanatorium has definitely proved that the addition of Virol to the diet exercises a remarkable influence on the phagocytic action of the leucocytes. The experiments showed there was a distinct and progressive increase in the functional activity of the white cells in proportion to the number of weeks the patient had been fed on Virol.

Proof from actual micro-photographs



BEFORE FEEDING ON VIROL.

From an actual Micro-photograph illustrating the deficient average Opsonic power of the Blood of a number of patients suffering from the debilitating effects of acute infections, before treatment with Virol. The average number of Bacilli ingested by each Polynuclear Leucocyte in fifteen minutes was 1.1, the Opsonic Index being 0.41.



AFTER FEEDING ON VIROL.

From an actual Micro-photograph illustrating the increased Opsonic power of the Blood of a patient after twelve weeks' treatment with Virol. The average number of Bacilli ingested by each Polynuclear Leucocyte in fifteen minutes was 4.5, the Opsonic Index being 1.5. Contrast this with the deficient average Opsonic power of the Blood of children of similar age not treated with Virol. (See opposite Micro-photograph.)

VIROL

Used in more than a thousand Hospitals and Sanatoria

S.S.S.

VIROL LIMITED AGENCY, 27, St. Peter's Street, Montreal.

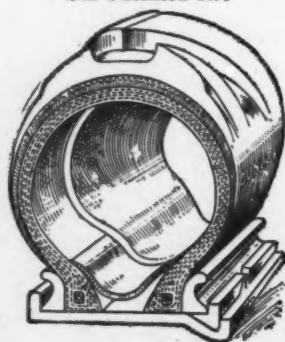


CHAINS NOT NECESSARY

Dunlop Traction Treads are not slaves, that's why they will not stand for Chains.

Dunlop Traction Tread
Straight Side
Our Patented Tire

66
inches
larger



Never
did
rim-cut

Most Envied Tire in all America

THE ORIGINAL CARPET SWEEPER AND VACUUM CLEANER

THE *SWEeper-VAC.*

Simple in construction, durable, efficient, fully guaranteed, absolutely sanitary, endorsed and recommended by physicians.

The **SWEeper-VAC** is the only vacuum cleaner in the WORLD that runs a real CARPET SWEEPER in combination with a vacuum cleaner with the possibility of using either separately or both combined.

REMOVES EVERY PARTICLE of dust, dirt, threads, lint and hair.

The name **SWEeper-VAC** tells what the machine is: a combination carpet sweeper and vacuum cleaner.

The **SWEeper-VAC** combination consists of two machines, each separate in itself.

The CARPET SWEEPER is small enough to run under the vacuum cleaner so that each can run along at the same time, each doing its own work thoroughly.

The VACUUM CLEANER, by its suction, will remove from a CUPFUL to a QUART of solid dirt from any large rug in two MINUTES, after it has been beaten or otherwise cleaned. The little CARPET SWEEPER at the same time with its especially constructed brush will pick up all lint, threads and hair.

Although the carpet sweeper and vacuum cleaner can each be used independently, they will generally be used in combination.

We GUARANTEE that this remarkable **SWEeper-VAC** combination will do more thorough work than many ELECTRIC MACHINES selling at TEN TIMES ITS PRICE.

The **SWEeper-VAC** differs from the ordinary vacuum cleaners.

BECAUSE it removes lint, threads and hairs, as well as extracts the dirt and dust.

BECAUSE it has no hose, no tubes, no nozzles.

BECAUSE it has no motor nor electricity, and is a boon to the sick room.

BECAUSE it makes no noise.

BECAUSE it is the ONLY THREE IN ONE CLEANER IN THE WORLD.

Read the following carefully.

A PHYSICIAN WRITES:—"We have been using the **SWEeper-VAC** machine for some considerable time in our home and find it EXCEEDINGLY SATISFACTORY. It really takes up ALL THE DIRT AND DUST in a carpet and entirely without causing DUST IN THE AIR OF THE ROOM. It is easily handled, and the mechanism is very simple and will not readily get out of repair."

A LADY PHYSICIAN WRITES:—"It gives me much pleasure to thoroughly endorse all that is claimed for the **SWEeper-VAC**, having had one in use for several months. It creates no DUST IN USING, and is SURPRISING TO A GOOD HOUSEKEEPER WHAT IT REMOVES."

A PROMINENT SOCIETY LADY WRITES:—"This is to say that I have a **SWEeper-VAC** and am MORE THAN PLEASED WITH THE WORK IT DOES, finding it much superior to an ELECTRIC VACUUM CLEANER which I paid \$200.00 for, and it is not nearly so cumbersome an article to move."

THE CARETAKER OF ONE OF THE LARGEST CHURCHES IN TORONTO WRITES:—"This is to certify that I had the trial of an ELECTRIC VACUUM CLEANER costing \$150.00, and also a trial of one costing \$45.00, after which I had a trial of the **SWEeper-VAC**, and I found that the **SWEeper-VAC** did the BEST WORK."

OUR CLAIMS: PROVE NOTHING—A TRIAL PROVES OUR CLAIMS

AN OPPORTUNITY to thoroughly try and test the **SWEeper-VAC** will be given to ANYONE, ANYWHERE without its costing them one single cent.

IN ANSWERING mention the PUBLIC HEALTH JOURNAL and thus save EXPRESS CHARGES.

DEPT. P.

DOMINION SALES COMPANY
TORONTO ARCADE TORONTO
RELIABLE AGENTS WANTED IN SOME TERRITORIES NOT YET ASSIGNED

MODEL

"S"

THREE

IN

ONE

Complete

\$ 15.00



The Original Vacuum Carpet Sweeper

CUT

THIS OUT

and mail

Dominion Sales

Co., Toronto

Arcade, Toronto

Please send me

full descriptive

circular, and copies

of Testimonials; also

information how I can

secure a Sweeper-Vac on

approval, without cost.

Name.....

Address.....

Date.....

CANADIAN PACIFIC

WHEN YOU TRAVEL

Travel in Comfort

The Canadian Pacific offers to the travelling Public, service and equipment second to none. They build, own, and operate their Compartment Observation Cars, Standard Sleepers, Dining Cars, Coaches and Motive Power.

The Canadian Pacific own and operate a line of palatial hotels along the Railway from Atlantic to Pacific, thus affording their patrons every possible comfort.

The Canadian Pacific can ticket you around the World, and enable you to travel over two thirds of the World's journey, on their own trains and steamers.

Those contemplating a trip will receive full details and literature from any C.P.R. Agent, or write,

M. G. MURPHY

District Passenger Agent,

TORONTO

WITHROW TOUR

High Grade

Rate - \$570

BEST OF

EUROPE

July 2, on new Allan Line S.S. **Calgarian**, 18,000 tons.
Return on magnificent White Star Steamer **LAURENTIC**, 14,982 tons.
Leave Liverpool, August 29.

Superior Features :

All First Cabin Staterooms.
All Grade A Hotels.
Drives—Livery Carriages or Motors.
Party select and small.

Extensive Route :

Shakespeare Country, London, Hague, Amsterdam, Marhen, Cologne, Rhine, Weisbaden, Berlin, Dresden, Nuremberg, Munich, Lucerne, Interlaken, Grindlewald, Brigue, Milan, Venice, Florence, Rome, Naples, Genoa, Monte Carlo, Nice, Marseilles, Arles, Avignon, Orange, Vienne, Lyons, Paris.

Unique Feature :—RHONE VALLEY.

APPLY FOR ALL DETAILS

ALLAN LINE, 95 King St. West, Toronto.

Steamship Reservations in Priority of Booking.

*The
Book*

Prescribe
Medicines
Intelligently

Propaganda for Reform in Proprietary Medicines

Explains how an injustice is done the physician and patient by prescribing unstable, inefficient and frequently fraudulent proprietary medicinal products.

READ this book and you will realize the danger which the physician encounters by prescribing proprietary products of unknown composition.

ANALYZE its contents and you will understand why the physician must be cautious so as not to be deceived by vague and mysterious statements regarding unknown proprietary remedies.

REVISED AND GREATLY ENLARGED

375 pages. 101 Illustrations. Cloth. Price, \$1.00

American Medical Association

535 North Dearborn Street

CHICAGO, ILL.

T. & N. O. Railway Train Service

Through trains daily between Toronto and Englehart, operating cafe parlor and Pullman services.

Daily services between North Bay and Cochrane, operating C. P. R. sleeper, running direct to and from Montreal.

Local service for Charlton connecting with trains 1 and 2, also 46 and 47

At Iroquois Falls connecting with trains 1 and 2 for Porcupine.

For full particulars of running time or further information apply to any T. & N. O. Railway Agent.

A. J. PARR

Frt. and Pass. Agt.

North Bay.

PROVINCE OF ONTARIO



Department of Education

Offical Calendar

May:

1. University of Toronto examinations, in Arts, Law, Pharmacy, Music and Agriculture begin.

Inspectors report number of candidates for Senior High School Entrance, Senior Public School Graduation Diploma and the Model School Entrance examinations and the Lower School examination for Entrance into the Normal Schools and Faculties of Education.

Arbor Day. (1st Friday in May).

14. Notice by candidates to Inspectors due for the following examinations—The Middle School examination for Entrance into the Normal Schools, The Upper School examination for Entrance into the Faculties of Education, the Pass and Honor Matriculation examinations (before May 15th)—High School Regulation 35 (1), page 113.

16. Inspectors report number of candidates for above examinations. (Not later than May 16th.

22. Empire Day. (1st School day before 24th May).

25. Victoria Day (Monday).

26. Clerk of the Municipality to be notified by Separate School supporters of their withdrawal. (Before 4th Wednesday in May).

30. Assessors to settle basis of taxation in Union School Sections. (Before 1st June).

THE BEST CURE

is often to get out on the land. ONTARIO LANDS offer both prosperity and health to those who desire to take advantage of the opportunities afforded. In old Ontario there are fruit lands, vegetable lands and mixed farming lands available at reasonable prices which offer prospect of advancement in value within the next few years in addition to the value of the annual returns. They also include many of the conveniences of modern life, as well as the beauties of nature.

In New Ontario there are lands available in some places for nothing and in others at a nominal price of fifty cents per acre, which are capable of producing almost all kinds of crops, and which constitute one of the best chances at the present time for the settler who desires to take up cheap lands.

Further information will be supplied on application to

HON. J. S. DUFF,

Minister of Agriculture,

Parliament Buildings,
TORONTO.

H. A. MACDONELL,

Director of Colonization,

Parliament Buildings,
TORONTO.

The following circular is Printed on a card and will be sent to those making application for same:

HOW TO DEAL WITH THE FLY NUISANCE

House flies are now recognized as **MOST SERIOUS CARRIERS OF THE GERMS OF CERTAIN DISEASES** such as typhoid fever, tuberculosis, infantile diarrhoea, etc.

They infect themselves in filth and decaying substances, and by carrying the germs on their legs and bodies they pollute food, especially milk, with the germs of these and other diseases and of decay.

NO FLY IS FREE FROM GERMS

THE BEST METHOD IS TO PREVENT THEIR BREEDING

House flies breed in decaying or decomposing vegetable and animal matter and excrement. **THEY BREED CHIEFLY IN STABLE REFUSE.** In cities this should be stored in dark fly-proof chambers or receptacles, and it should be **REGULARLY REMOVED WITHIN SIX DAYS** in the summer. Farm-yard manure should be regularly removed within the same time and either spread on the fields or stored at a distance of not less than quarter of a mile, the further the better, from a house or dwelling.

House flies breed in such decaying and fermenting matter as kitchen refuse and garbage. Garbage receptacles should be kept tightly covered.

ALL SUCH REFUSE SHOULD BE BURNT OR BURIED within a few days, **BUT AT ONCE IF POSSIBLE. NO REFUSE SHOULD BE LEFT EXPOSED.** If it cannot be disposed of at once it should be sprinkled with chloride of lime.

FLIES IN HOUSES.

Windows and doors should be properly screened, especially those of the dining-room and kitchen. Milk and other food should be screened in the summer by covering it with muslin; fruit should be covered also.

Where they are used, especially in public places as hotels, etc., spittoons should be kept clean as there is very great danger of flies carrying the germs of consumption from unclean spittoons.

Flies should not be allowed to have access to the sick room, especially in the case of infectious disease.

The faces of babies should be carefully screened with muslin.

FLIES MAY BE KILLED by means of a weak solution of formalin (40 per cent.) exposed in saucers in the rooms. This is made by adding a teaspoonful of formalin to a pint of water. The burning of pyrethrum in a room is also effective.

House flies indicate the presence of filth in the neighborhood or insanitary conditions.

**ENTOMOLOGICAL DIVISION, CENTRAL EXPERIMENTAL FARM, OTTAWA
DEPARTMENT OF AGRICULTURE, CANADA.**

(Published by direction of the Minister of Agriculture.)



Protected by Canadian Patents.

SANITARY. DISINFECTANT.
NO DUST WHILE YOU SWEEP.

**Why Breathe
Dust and Germs?**

Packed in Bbls., $\frac{1}{2}$ Bbls., $\frac{1}{4}$ Bbls.
for Stores, Schools, and Public Bldgs.
Household pkgs. at your grocer's.

Dustbane Mfg. Co., Ltd.
Ottawa - Ontario

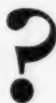
**THE ONLY FACTORY OF ITS
KIND IN CANADA**

MANUFACTURING

Trusses, Elastic Stockings, Suspen-
sories, Shoulder Braces, Sup-
porters, Chamois Vests,
Crutches, Splints,
Rubber Sundries



**The Ottawa Truss & Surgical
Mfg Co., Limited,**
OTTAWA, - CANADA



Are you particular as to the condition of the
iron in your Blaud preparations?

Frosst's Perfected Blaud Capsules present True
Ferrous Carbonate.

Each 10 grain Capsule contains, approxima-
tely, 1 grain of iron.

Charles E. Frosst & Co.
Montreal

A Doctor's Widow Writes—

R. H. Carney, Esq.,
District Manager,
Sault Ste. Marie, Ont.

Thessalon, Ont., Jan. 30th, 1914.

Dear Sir,—

Please accept my thanks for the very prompt and satisfactory settlement of my claim against your Company in connection with the accident policy on the life of my late husband. The original amount of the policy was for \$1,000.00, which together with bonus additions makes a total of \$1,250.00. Your Company is the first to settle, and I appreciate the satisfactory manner in which both yourself and your Company transact business.

Thanking you for your courtesy and kind attention, I remain,

Yours very truly,

(SGD.)

JULIA MAUDE SPENCE.

Doctor Spence was accidentally poisoned on January 19th.

THE BROADEST ACCIDENT AND SICKNESS POLICIES
ARE SOLD BY

The General Accident Assurance Co. of Canada
The Canadian Casualty and Insurance Co.

Head Office : Continental Life Bldg., Toronto

JOHN J. DURANCE, Manager

UNIVERSITY OF TORONTO

FACULTY OF ARTS.

Instruction in the courses leading to the degree of B.A., M.A., and Ph.D. is given in the University, University College, Victoria College and Trinity College.

The Colleges provide instruction in the Classical, Modern and Semitic Languages and Literature, Ancient History and Ethics. The University gives training in the remaining subjects of the curriculum.

FACULTY OF MEDICINE.

Complete courses of instruction with ample opportunities for clinical training at the General Hospital, St. Michael's Hospital, Hospital for Sick Children, leading to M.D. and D.P.H.

FACULTY OF APPLIED SCIENCE.

Courses in Civil, Mining, Mechanical, Electrical and Chemical Engineering; Architecture and Applied Chemistry leading to the Degree of B.A.Sc.

FACULTY OF HOUSEHOLD SCIENCE.

Courses for normal and occasional students.

FACULTY OF EDUCATION.

Professional training for Public School, High School and Inspector's certificates.

FACULTY OF FORESTRY.

Courses leading to the diploma and the degree.

AFFILIATED INSTITUTIONS.

The affiliated Colleges and Schools train candidates for University standing in Dentistry, Pharmacy, Agriculture, Music, and Veterinary Science.

For information apply to the Registrar of the University, or to the Secretaries of the respective Faculties, Toronto, Ont.



Norwich Cathedral.

NORWICH UNION FIRE INSURANCE SOCIETY LIMITED

Norwich, England

INSURANCE AGAINST
FIRE, ACCIDENT & SICKNESS
EMPLOYERS LIABILITY
PLATE GLASS

Agents wanted for the Accident Branch

Head Office for Canada
12-14 Wellington Street East

Norwich Union Building
TORONTO

The Prudential Home Offices,
NEWARK, N.J.

11 Million Policies,
2 Billion Dollars
Life Insurance in Force!



The Prudential Insurance Company of America

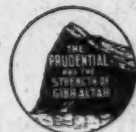
Founded by JOHN F. DRYDEN, Pioneer of industrial insurance in America

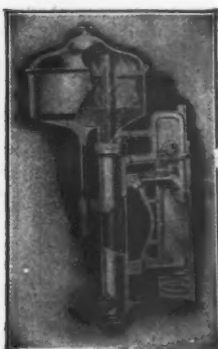
FORREST F. DRYDEN, President.

Incorporated as a Stock Company by the State of New Jersey.

Home Office, NEWARK, N.J.

Write for Particulars of Policies





Gas Operated Water Stills

DISTILL the water you drink with our WATER STILL. It is easily installed over the kitchen sink or any other convenient place. The purest of water can be obtained for less than 2 cents per gallon—75 per cent. cheaper than purchasing water elsewhere. Price on application.

Consumers' Gas Company of Toronto

12-14 Adelaide St. West

Telephone Main 1933-1188

Read "Gas News." You will find valuable information.



J. L. JONES
ENGRAVING
CO.
LIMITED

PHOTO & WOOD
ENGRAVING
& ELECTROTYPING, FOR ALL ADVERTISING PURPOSES

16 ADELAIDE STREET WEST
TORONTO
OPPOSITE THE GRAND OPERA HOUSE CANADA. TELEPHONE MAIN 3043

Illuminated Advertisements
From C. C. W. W. W.

"Get up, get up! There's a burglar in the house," whispered the penniless poet's wife.

"What of it? Let him find out his mistake for himself."—*Liverpool Mercury.*

"Hello."

"I do have the worst trouble with the 'phone!"

"What's the cause?"

"The service, of course. Let me show you. 'Hello, exchange, hello. Why don't you answer? I want Mrs. Brown, Mrs. Julia Brown. What number? Sixty-two Tanglefoot street. Number? I just told you. Oh, that? You mean her telephone number? Why, it's—there, you've gone and put it all out of my head. I'll have to look in the book. Dear, dear, the book is upstairs. Well, I never in all my life saw such service!'"—*Cleveland Plain-Dealer.*

Misfits.

It was Robert's first visit to the Zoo.

"What do you think of the animals?" inquired Uncle Ben.

After a critical inspection of the exhibit the boy replied:

"I think the kangaroo and the elephant should change tails."—*Youngstown Telegram.*

"Mrs. Muchwedd has certainly had a very diversified life."

"You mean divorce-ified." — *Boston Transcript.*

An Improper Subject.

On a recent Sunday afternoon at a large sanitarium devoted entirely to treating tuberculosis, a young Methodist minister was preaching to the assembled patients, nurses and doctors. In a most vivid manner he was describing the great peace, contentment and happiness to be had in the world to come. Suddenly one of the patients, a girl of about twenty years of age, burst out crying.

"What is the matter?" was the general chorus, as the rest crowded around her.

"Oh," she sobbed, "I wish he would stop talking about heaven. I am here paying eighteen dollars a week just to keep out of that place."

THE ROYAL BANK OF CANADA

Capital Authorized	-	-	\$25,000,000
Capital Paid Up	-	-	\$11,560,000
Reserve Funds	-	-	\$13,000,000
Total Assets	-	-	\$180,000,000

HEAD OFFICE: MONTREAL.

H. S. HOLT, President

E. L. PEASE, Vice-President & General Manager

315 Branches in CANADA and NEWFOUNDLAND; 30 Branches in the WEST INDIES

LONDON, ENGLAND, Princes St., E.C.

NEW YORK, Cor. William and Cedar St.

SAVINGS DEPARTMENT AT ALL BRANCHES.

INVEST YOUR SAVINGS NOW

and Create a Reliable Asset.

THE LONDON and LANCASHIRE LIFE and GENERAL ASSURANCE ASSOCIATION, Limited
(CANADIAN BRANCH)

Head Office, MONTREAL.

ALEX. BISSETT, Manager for Canada.

Policies World-Wide and Free from Restrictions.

ARE YOUR PRIVATE PAPERS SAFE?



THE BARLER NEW DOCUMENT FILE (opens like a book). A handy file in your office, your home, or in your safety deposit box at the bank. Steel covers with flanged edges, bound in seal grain keratol leather. Cord allows expansion to suit contents, and holds fast in any position without tying.

INDEX CARD WITH EACH FILE. A SAFE SIMPLE SYSTEM FOR PROTECTING DOCUMENTS. LASTS A LIFETIME.

No. 87. $6\frac{1}{4} \times 10\frac{1}{4}$ in. 18 strong pockets, $4\frac{1}{2} \times 10\frac{1}{2}$ in. with metal eyelets, \$1.50

No. 9. $6\frac{1}{4} \times 10\frac{1}{4}$ in. 20 strong pockets, $6\frac{1}{2} \times 10\frac{1}{2}$ in. with metal eyelets, \$1.75

The A. S. HUSWITT CO., 44 Adelaide St. W., TORONTO

YOUR HEALTH IS GOOD

SUN LIFE
 ASSURANCE
 COMPANY

to-day, perhaps, but
 that is no guarantee
 that it will be
 good *to-morrow*.

You may be able
 to get life assur-
 ance *to-day*.

To-morrow—
 who knows?

Life As-
 surance
 creates im-
 mediately, for
 the benefit of
 your family in the
 event of your death,
 an estate that it
 would take long years
 to accomplish by other means.

OF CANADA

EIGHTY MILLION DOLLARS**\$80,000,000****\$80,000,000**

of Insurance in Force is surely a
 testimony to the value of service
 rendered by a Life Insurance
 Company. This large volume of
 business indicates the esteem
 and confidence in which the
 Manufacturers Life is held by its
 Fifty Thousand Policyholders.

\$80,000,000**\$80,000,000**

**Special Terms and Rates to
 Total Abstainers.**

Write for booklet "Total Abstainers vs.
 Moderate Drinkers." It will interest you.
 A postcard to-day will do.

THE MANUFACTURERS LIFE**Insurance Company****Head Office: King and Yonge Sts., Toronto****Literal.**

During a concert tour of the late Theo-
 dore Thomas and his celebrated orchestra,
 one of the musicians died, and the follow-
 ing telegram was immediately dispatched
 to the parents of the deceased:

"John Black died suddenly to-day. Ad-
 vise by wire as to disposition."

In a few hours the answer was receiv-
 ed, reading as follows:

"We are broken-hearted; his disposition
 was a roving one."—Tit-Bits.

Keeping the Peace.

A gentleman, rushing from his dining-
 room into the hall and sniffing disgustedly,
 demanded of Jeames, the footman, whence
 arose the outrageous odor that was per-
 vading the whole house. To which Jeames
 replied: "You see, sir, to-day's a saint's
 day, and the butler, 'e's 'igh church, and
 is burning hincense, and the cook, she's
 low church, and is burning brown paper to
 hobviate the hincense."—Argonaut.

Seeking Expert Opinion.

A Chicago business man, with many
 relatives, some of whom were well-to-do
 but grasping, recently sought the services
 of his lawyer to draw up his will. When
 after much labor, the document was com-
 pleted, the client asked:

"Have you fixed this thing, as I wished
 it, tight and strong?"

"I have done my best," said the lawyer.

"Well," continued the client, "I want
 to ask you another thing—not profession-
 ally, however. As a friend, and man to
 man, who do you think stands the best
 chance of getting the property when I am
 gone?"—Harper's Magazine.

In Memoriam.

"My word, Jacob," said Steinberg,
 "that is a beautiful diamond you have in
 your pin. How much did it cost?"

"I paid one thousand dollars," replied
 Jacob.

"One thousand dollars Good gra-
 cious!" exclaimed Steinberg. "Vy, I did
 not know you ver vorth so much money."

"Vell, you see," exclaimed Jacob, "ven
 der old man died he left one thousand
 dollars for a stone to be erected to his
 memory, and dis is der stone."—Kansas
 City Star.

THREE REASONS IN THREE WORDS

H O M E

When this word is mentioned a plea is set up for life insurance, because in the event of death a Mutual Life policy will keep the home intact.

W I F E

To manage the house and at the same time provide for the support of the household is an appalling task. A Mutual Life policy will protect the widowed wife from this bitter necessity.

C H I L D

Health, freedom, a good education, and even a good character may depend upon the child being shielded from poverty by a Mutual Life policy.

The Mutual Life Assurance Company of Canada
Waterloo - Ontario

Protect YOUR FAMILY while it is Dependent upon You!

Protect YOURSELF against Dependence on your Family, in your OLD AGE!

HOW?

By securing a "SPECIAL FAMILY POLICY" in

THE NATIONAL LIFE

ASSURANCE COMPANY OF CANADA

For particulars, write direct to
Head Office - - - National Life Chambers, Toronto

ALBERT J. RALSTON
Managing Director.

ELIAS ROGERS, *President.*

F. SPARLING,
Secretary.

SEVERAL GOOD OPENINGS FOR PRODUCERS

THE HOME BANK OF CANADA

ORIGINAL CHARTER 1854

NINE OFFICES IN TORONTO

British and Foreign Correspondents in all the principal cities of the world.

Letters of credit issued enabling Canadians travelling abroad to have ready access to funds in any foreign city.

8-10 King St. West, Head Office and Toronto Branch	
78 Church Street	Cor. Bloor West and Bathurst
Cor. Queen West and Bathurst	236 Broadview Cor. Wilton Ave.
Cor. Queen East and Ontario	1871 Dundas St., Cor. High Park Ave.
1151 Yonge St. (2 doors North of Shaftsbury Ave. on East Side)	
2115 Yonge Street, North Toronto, Cor. Eglinton Ave.	

BONDS FOR \$100

Many people of small means are possibly not aware of the opportunity for safe investment offered by our **\$100 Bonds**. The small investor has looked upon owning Bonds as rather beyond him, thinking of Bonds as being only in denominations of \$1,000, or some other equally impossible sum.

But \$100 will buy one of our Bonds, giving the holder of it precisely the same security as those of largest denominations. They are a security in which Executors and Trustees are by law authorized to invest.

TRUST FUNDS

Shall we send you copy of our Annual Report with a Specimen Bond and full particulars?

Canada Permanent Mortgage Corporation

Paid-up Capital and Reserve Fund exceed TEN MILLION DOLLARS

TORONTO STREET

TORONTO

ESTABLISHED 1855

Nothing Exclusive.

"So you are opposed to grand opera at popular prices?"

"Yes. Next they'll be having terrapin at popular prices and orchids at bargain rates. And then what interest will a rich man have in life?"—Kansas City Journal.

"Conductor, can you tell me how that brakeman lost his finger?" asked the inquisitive woman. "He seems to be a very nice fellow. It is a pity he should be crippled."

"That's just it, mum. He is a good fellow. He is so obliging that he wore his finger off pointing out the scenery along the line."—Chicago News.

His Rake-off.

English Guide (showing places of interest)—It was in this very room, sir, that Wellington received his first commission.

American Tourist—Indeed! And how much commission did he get?—Boston Transcript.

Professor at Agricultural School—What kinds of farming are there?

New Student—Extensive, intensive, and pretensive.—Indianapolis Star.

We're Wrong Again.

"Of course, you have your little theory about the cause of the high cost of living?"

"I have," replied Mr. Growcher, "too many people are trying to make political economy take the place of domestic economy."—Washington Star.

Financier—What's all the hubbub in the directors' room?

Steno.—Some wise minority stockholder just found that the office cat is on the payroll for \$3,000 a year under the name T. Feline.—Milwaukee News.

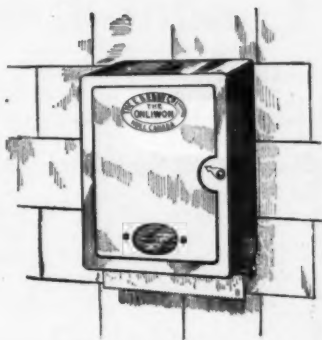
"Do you believe in long engagements?"

"Of course. The longer a man is engaged, the less time he has to be married."—Tit-Bits.

From an Arkansas Paper.

Zeke Barrow has accepted the appointment of revenue officer from this district. He will leave a wife and three children.

—and you get this
splendid cabinet **FREE**



Finished in beautiful nickel plate.

Cannot get out of order.

We want an "Onliwon" in all the better homes and public buildings throughout Canada.

Simply buy your regular supply of Toilet Paper from us, and one Cabinet—to introduce—will be given absolutely without cost.

To architects, builders, building superintendents, hospital superintendents and hotel proprietors—we are ready to supply any number of "Onliwon" Cabinets—**FREE**—on the same basis as we offer to the ordinary householder.

Write now for prices of paper and full particulars

The E. B. Eddy Co., Limited

Established 1851

HULL - CANADA

Branches and Agencies in 25 Canadian Cities

"GOOD AS GOLD"

ARE THE
POLICIES

OF THE

London Life

—Insurance Company—

Head Office: LONDON, CANADA

Maturing 20-Year Endowment in the ordinary Branch show returns of \$140 per \$100 paid in premiums.

Full Insurance Protection in addition.

Ask for samples of Actual Results.

THE CENTRAL CANADA LOAN AND SAVINGS CO.

26 King St. East, Toronto.

Total Assets	\$9,782,000.
Capital (sub.)	\$2,500,000.
Capital (paid up)	\$1,750,000.
Reserve Fund	\$1,550,000.

Deposits received and debentures issued.

President
Hon. Geo. A. Cox

Managing Director
E. R. Wood

Assistant Manager
G. A. Morrow

A Reportable Case.

The vicar advertised for an organist the other day. Among the replies he received was the following:

"Dear Sir,—I notice that you have a vacancy for an organist and music teacher, either lady or gentleman. Having been both for several years, I beg to apply for the Position."—Tid-Bits.

Some Popular Lies.

"Thank you, I never slept better in my life."

"I never smoked a better cigar, old man."

"Can't tell you how sorry I am there is no room for your little boy in my car."

"Yes, we get nine eggs a day."

"I couldn't possibly live without you."

"Pretty good for me—I went around in ninety-nine."

"I nearly died laughing."

"Oh, no, mother, my feet are not wet."

"Yes, I smoke occasionally, just to be sociable."

"He is the living image of his father."

"Just twenty minutes from the City Hall."

"You'll find this just as good, madam."

"I love you."

"I understand you got into jail," said the warden, "on account of a glowing mining prospectus."

"I was quite optimistic," admitted the gentlemanly prisoner.

"Well, the governor wants a report on conditions in my jail. I want you to write it."—Pittsburg Post.

One Advantage.

"There's one thing I like about these new-fangled dinner dances."

"What's that?"

"They keep a man from wondering what to do with his hands between courses."—Detroit Free Press.

Real Candor in a Card of Thanks.

We wish to thank those who offered and assisted us in the death of our uncle, Samuel Ardrey.

S. N. Ardrey,
Andy Ardrey.

—Centre (Mo.) Herald.

CONTINENTAL LIFE

Insurance Company

HEAD OFFICE - TORONTO

"BROAD AS THE CONTINENT, STRONG AS THE EMPIRE."

¶ In this age of strenuous competition and rush for business the only safety for the business man lies in a

GOOD LIFE INSURANCE POLICY

¶ The POLICIES of the CONTINENTAL LIFE are liberal and unrestricted, and carry the highest guaranteed Cash and Loan Values, Paid-up and Extended Assurance Options.

For Particulars write to the HEAD OFFICE or any of the Company's Agents.

GEORGE B. WOODS,
President and Managing-Director.

CHARLES H. FULLER,
Secretary and Actuary.

"The Best Insurance at lowest net cost"
is issued by

THE DOMINION LIFE

Interest rate (8%) and Mortality Savings of 73% are two of its main sources of

PROFITS TO POLICYHOLDERS

Head Office - - - - - Waterloo, Ontario

ESTABLISHED 1875

Imperial Bank of Canada

D. R. WILKIE

President, General Manager

Capital Authorized	-	-	-	-	\$10,000,000.00
Capital Subscribed	-	-	-	-	7,000,000.00
Capital Paid Up	-	-	-	-	6,992,000.00
Reserve Fund	-	-	-	-	7,000,000.00

SAVINGS DEPARTMENT

INTEREST ALLOWED ON DEPOSITS AT BEST CURRENT RATES



Hearts of Oak

IT takes decades to bring the oak from the acorn; but the oak breasts any gale that blows.

For nearly a third of a century the North American Life has driven its roots deep into the bed-rock of financial stability.

To-day its financial position is impregnable. It is heart-of-oak.

Every North American Life Policy is backed by Thirteen and One Quarter Million Dollars of Assets and by three decades of upright business practice.

The North American Life is a *safe* Company in which to insure.

North American Life Assurance Company

"SOLID AS THE CONTINENT"

Head Office - Toronto, Canada

SIX FACTS

from the 67th ANNUAL REPORT of THE CANADA LIFE ASSURANCE COMPANY

In important respects the Company in 1913 excelled its record for any previous year in its history.

1. THE SURPLUS EARNED in 1913 was \$1,709,959.66, exceeding by over \$179,000 the earnings of 1912, and by a much larger amount the earnings of any previous year. The present net surplus is \$6,183,278.39.
2. THE INCOME of \$8,094,885.70 was greater than that of the previous year by \$698,125.96, and the greatest in the Company's history. The rate of interest earned, which had been steadily advancing since 1899, was further improved in 1913. This is an important factor in producing surplus.
3. THE ASSETS were increased by \$3,860,271.32, and now stand at \$52,161,794.81.
4. THE TOTAL ASSURANCES now in force are for \$153,121,363.94, an increase of over \$8,273,000 in the year.
5. THE PAYMENTS TO POLICYHOLDERS in 1913 totalled \$2,878,016.11, an increase of \$415,051.31 over those of 1912. In addition to this, LOANS TO POLICYHOLDERS on security of their policy contracts were made for \$1,692,248.71.
6. THE MORTALITY of the year was again more favorable than the expectation, and this, with a continued LOW EXPENSE RATIO, contributed to the earning of a record surplus.

THE CANADIAN BANK OF COMMERCE

ESTABLISHED 1867.

Sir Edmund Walker, C.V.O., LL.D., D.C.L., President
Alexander Laird, General Manager. John Aird, Assistant General Manager
Paid-up Capital \$15,000,000 Rest \$13,500,000

HEAD OFFICE, TORONTO.

London, England: 2 Lombard Street, E.C. New York: 16 Exchange Place.
Mexico City: Avenida San Francisco, No. 50. St. John's, Nfld.

In addition to the offices named above, the Bank has branches in every province of Canada and is therefore particularly well equipped for the handling of collections and the transaction of every description of banking business.

Drafts and Money Orders on all the principal countries of the world issued by every branch of the Bank.

Travellers' Cheques are a most convenient form in which to carry money when travelling. They can be used either at home or abroad and the exact amount payable in foreign money is printed on the face of each cheque. The cheques are issued in denominations of \$10, \$20, \$50, \$100 and \$200, and are obtainable at any branch of the Bank.

Letters of Credit issued negotiable in all parts of the world.

The Metropolitan Life Insurance Co.

wrote more Ordinary insurance in the United States and Canada in 1913 than any other company. The amount was \$230,563,693, which was all the law permitted it to write. In Canada the amount of Ordinary written was \$18,275,895.

It furnishes Industrial life insurance to wage earners substantially at cost. It has in Canada almost 700,000 Industrial policies outstanding, which are held by workingmen.

In an attempt to lessen the death rate it has established a free nursing service, and in 1913 Metropolitan nurses made more than 1,127,000 visits to 175,757 sick Industrial policyholders, free of charge.

The Company has distributed millions of pamphlets giving valuable hints on the improvement of health conditions and the prevention of disease.

It has on deposit, with the Dominion Government and trustees, for the protection of Canadian policyholders, nearly sixteen-and-a-half million dollars of securities.

It paid in 1913, 167,017 policy claims, amounting to \$27,801,848.12.

Assets	-	-	\$447,829,229.16
Capital and Surplus	-	-	35,584,901.65
Liabilities	-	-	412,244,327.51

(According to the report for 1913 filed with the New York State Department.)

Metropolitan Life Insurance Co.

1 Madison Avenue

New York City

Standardized Disinfectants

Chloro-Naptholeum Disinfectant

HYGIENIC LABORATORY PHENOL COEFFICIENT 6.06

Wescol Disinfectant

HYGIENIC LABORATORY PHENOL COEFFICIENT 15

Hygienic Laboratory Bulletin No. 82 of the U. S. Public Health Service (recently issued) in tests made of the leading commercial disinfectants establishes the above efficiency for our product.

MANY WIDELY ADVERTISED DISINFECTANTS ARE
SHOWN TO POSSESS SO LITTLE GERMICIDAL
EFFICIENCY AS TO MAKE THEIR COEFFICIENT
PRACTICALLY INDETERMINABLE.

Write for tests and descriptive literature.

West Disinfecting Company

12 East 42d Street . . . New York

